CLASS AND SOCIAL IDENTITY IN ST. GEORGES HUNDRED CA. 1830-1920 FINAL ARCHAEOLOGICAL EXCAVATIONS AT LOCUST GROVE, STATE ROUTE 1 CORRIDOR ODESSA, NEW CASTLE COUNTY, DELAWARE

By

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John Bedell, and Lenore Santone

THE CULTURAL RESOURCE GROUP
LOUIS BERGER & ASSOCIATES, INC.
East Orange, New Jersey

Delaware Department of Transportation Series No. 153

Eugene E. Abbott
Director of Planning

Delaware
Department of Transportation

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Federal Highway Administration

PLATE 1: Field Crew
Front Row, Left to Right: Earl Proper, Bruce Bourcy, Robert Jacoby, Charles Bedall
Back Row, Left to Right: Charles LeeDecker, Lenore Santone, Becky Sterling, Glen Mellin, Joelle Browning, Andrea DeNight, Paul Stansfield, Jane Taylor, Lee Weber, Kim Pokorosky, James Skocik, Catherine Skocik

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ABSTRACT

The Cultural Resource Group of Louis Berger & Associates, Inc. (LBA), has conducted Phase III archaeological investigations of the Locust Grove Site (7NC-F-73), which is situated in the proposed State Route 1 (SR 1) corridor from Pine Tree Corners to Drawyer Creek in New Castle County, Delaware. A principal goal of the study was the recover archaeological and historical data on the organization of space, the foodways and consumer behavior of the site's occupants, and their economic and social standing in the rural community of St. Georges Hundred. It was hoped that by examining these aspects of the Locust Grove residents' lives, it would be possible to draw some conclusions about the ways in which material culture expressed and reinforced social and class identity in nineteenth-century rural Delaware.

The Locust Grove Site consists of archaeological deposits associated with Locust Grove, a standing nineteenth-century house located on Middletown Road (SR 299) approximately one mile west of Odessa. The Locust Grove property was first developed during the mid-eighteenth century by Robert Meldrum and was subsequently acquired by Samuel Pennington, in whose family it remained until 1939. Most, or perhaps all, of the historic archaeological deposits and features uncovered at the site appear to be associated with the ownership of Pennington's son, Samuel, Jr., including concentrations of household refuse in the front and side yards dating to the nineteenth century, the rubble remains of a historic chimney, and a series of landscaping deposits. A possible prehistoric pit house or noncultural treefall feature was also encountered during the excavations.

It is likely that some of the refuse deposits identified in the front yard were created prior to the 1880s, when this portion of the property functioned as a side yard. During the last quarter of the nineteenth century a large Second Empire addition was built onto the earlier Greek Revival house and the front and side yards were landscaped. This large addition marked a reorientation of the house in the direction of the road, and was accompanied by a change in refuse disposal behavior on the part of the farmstead's occupants. The Second Empire addition and landscaped yards, together with many of the household goods acquired, used, and discarded, served to express and reinforce the identity of the property's owners (and tenants) as refined, proper, and well-to-do rural capitalists.

ACKNOWLEDGMENTS

The Cultural Resource Group of Louis Berger & Associates, Inc., wishes to express thanks to the many people who provided guidance, advice, and assistance during the project. The Delaware State Historic Preservation Office provided an important oversight role and responded quickly to all requests for consultation and guidance. We wish especially to thank Gwen Davis, Alice Guerrant, and Dan Griffith for their considerable help. Important assistance was also provided by Charles Fithian of the Delaware State Museum, and the staffs of the Delaware Bureau of Archives and Records at the Hall of Records in Dover, the Odessa Public Library, and the Library of Congress in Washington, D.C.

A number of individuals from the Federal Highway Administration were very helpful. In particular, we would like to thank Tommy Beatty, Division Administrator, and Robert Kleinburd, Environmental Officer.

Many people at the Delaware Department of Transportation provided important assistance, and our thanks go particularly to the following: Ann Canby, Secretary; Raymond Harbeson, Chief Engineer; Eugene Abbott, Director, Planning; Joseph T. Wutka, Jr., Assistant Director, Planning; Therese M. Fulmer, Manager, Environmental Studies; Loretta Brisbane, Secretary; AnnaMay Decker, Project Scheduling and Support; Tim O'Brien, DOT Photographer; Dave DuPlessis, Project Engineer; and Kevin Cunningham, DOT Archaeologist.

We are also grateful to the following individuals from the Division of Support Operations: Bill Yerkes, Graphics and Printing Manager; Kate David, Graphics Specialist III; Robert J. Zullo, Graphics Specialist II; Justina Brewington, Photo Reproduction Technician; Jim Sylvester, Printer III; and Ed Wilkinson, Printer III.

The Cultural Resource Group of LBA had direct responsibility for the study. The LBA staff was under the overall direction of John Hotopp, Group Vice President. Charles H. LeeDecker served as Project Manager. Lenore Santone was the Principal Investigator during the field investigations, while Richard Affleck assumed the responsibilities of Principal Investigator for the data analysis and report preparation stages. Historical research was carried out by Ingrid Wuebber and Leslie Frucht. Robert Jacoby served as Field Supervisor and Earl Proper as Crew Chief. The field crew consisted of Charles Bedall, Bruce Bourcy, Joelle Browning, Andrea Denight, Glen Mellin, Kimberly Pokorosky, Christy Roper, Catherine Skocik, James Skocik, Paul Stansfield, Rebecca Sterling, Jane Taylor, and Lee Weber, assisted by Charles Dunton, Logistics Coordinator, and Jack Goudsward, Assistant Logistics Coordinator.

Laboratory processing and analysis was overseen by Laboratory Supervisor Sharla Azizi and Assistant Laboratory Supervisor Suzanne Kahn. The laboratory technicians included Erik Jonsberg, Magdalena Lozny, Suzan Percy, Geun-Bai John Ra, Barbara Slicner, and Sue Wong. Analysis of the prehistoric artifacts was conducted by John Killeen. The historic ceramics were analyzed by Meta Janowitz and Christy Roper. Glass analysis was conducted by Mallory Gordon,

and the small finds and architectural items were analyzed by Gerard Scharfenberger and Byron Simmons. The faunal analysis was carried out by Ludomir Lozny, and the faunal data were organized by David Breetzke. Data entry was performed by Rudy Alexander Ortiz and Rubi Arquiza. Lee Nicoletti, Production Manager, coordinated production of the report. The text was edited by Linda Fulcher, Valerie Moore, and Suzanne Szanto; graphic illustrations were prepared by Jacqueline Horsford and Linda Lipka. The photographic places were produced by Josh Lasco and Senior Photographer Rob Tucher.

Several specialized studies were undertaken by consultants. Dr. Kathryn Egan-Bruhy of the State Historical Society of Wisconsin was responsible for the flotation and floral analyses. The University of Delaware Soil Testing Laboratory conducted the soil chemistry analysis. Douglas Frink of the Archaeological Consulting Team, Inc., Essex Junction, Vermont, was responsible for the Oxidizable Carbon Ratio (OCR) dating for the site.

The Historic American Buildings Survey (HABS) for Locust Grove was produced by Kise, Franks & Straw.

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I. INTRODUCTION

This report presents the results of the Phase III archaeological data recovery investigations at Locust Grove (Site 7NC-F-73). These investigations were sponsored by the Delaware Department of Transportation (DelDOT) prior to the construction of State Route 1 (SR 1). The site, associated with a standing nineteenth-century house, is located on Middletown Road (SR 299), approximately one mile west of Odessa, in St. Georges Hundred, New Castle County, Delaware (Figure 1). The data recovery investigations were undertaken in order to examine undisturbed nineteenth-century archaeological deposits in the front and side yards of the Locust Grove property that had been identified during Phase I and Phase II testing in the proposed SR 1 corridor (Bedell et al. 1997). Phase III fieldwork, data analyses, and report preparation were carried out between November 1995 and February 1997, by Louis Berger & Associates, Inc. (LBA). The study has been conducted in accordance with the instructions and intents of Section 101(b)(4) of the National Environmental Policy Act; Sections 1(3) and 2(b) of Executive Order 11593; Section 106 of the National Historic Preservation Act; 36 CFR 771, as amended; the guidelines developed by the Advisory Council on Historic Preservation, published November 26, 1980; and the amended Procedures for the Protection of Historic and Cultural Properties, as set forth in 36 CFR 800.

SR 1 is a new limited-access highway that will carry traffic from Wilmington and I-95 around Dover to the Atlantic Ocean beaches, relieving dangerous congestion on U.S. Route 13. The proposed 50-mile-long SR 1 project corridor will also bypass the historic town of Odessa to the west. U.S. Route 13 is being relocated along portions of the corridor, and several access roads, a toll plaza, and two major interchanges (at SR 299 and County Road 420) are planned. The Locust Grove Site is located within the planned interchange area at the junction of SR 299 and SR 1. Plate 2 illustrates the site location along SR 299, just west of Odessa. The current study is part of a large program of archaeological study carried out by DelDOT and its consultants as part of the SR 1 project, the results of which have been published in the volumes of the DelDOT Archaeology Series, beginning in the mid-1980s.

Locust Grove contains a number of standing buildings, the most prominent being the house (Plate 3). The Locust Grove house, which has been determined eligible for listing in the National Register of Historic Places as a contributing resource to the *Rebuilding St. Georges Hundred (1830-1899)* thematic nomination (Herman et al. 1985), was built in two sections. The earlier portion, which appears to date to the 1830s or 1840s (Historic American Buildings Survey 1995), is a two-story Greek Revival frame structure that faces east, perpendicular to Middletown Road. What is now the front section of the house, set at right angles to the earlier structure and oriented toward Middletown Road, is a two-and-one-half-story Second Empire-style structure built in the 1870s. Together, the two sections form an L-shaped configuration.

Outbuildings on the property include a smokehouse dating to the nineteenth century, a large machine shed, a pole barn, a poolhouse, and a small shed which may have functioned as a

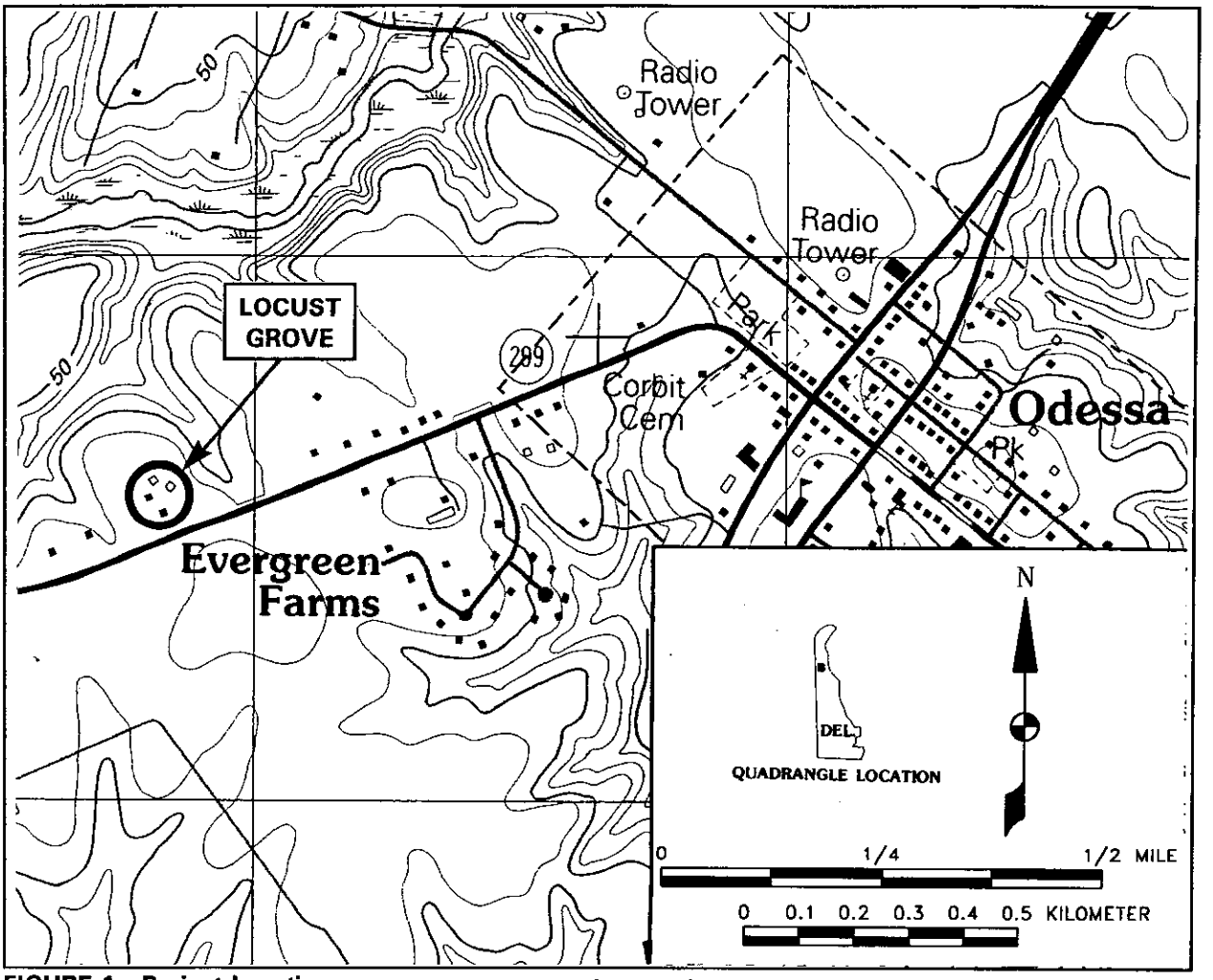


FIGURE 1: Project Location *Source: USGS 7.5 Minute Quadrangle, Middletown, Del., 1993*

chicken coop. A swimming pool surrounded by a concrete patio is also present on the site, just to the rear of the house.

Archaeological resources at Locust Grove were first identified during the Phase I survey of the SR 1 corridor in November and December 1994. Subsequent Phase II testing conducted at Locust Grove in May 1995 identified intact buried historic features and deposits in the landscaped yard areas around the house. As a result, the site was considered to be eligible for inclusion in the National Register of Historic Places under Criterion D, since it has demonstrated the ability to yield information important to history. The Locust Grove Site was considered to be significant because the area around the house had not been plowed, and therefore portions of the property were particularly well preserved, thus providing the opportunity to examine the lifeways and material culture of an elite St. Georges Hundred farm household in the mid- to late nineteenth century.

PLATE 2: Aerial View of Site Location

Fieldwork for the data recovery program was carried out over a four-week period from November 17 through December 15, 1995, and included the excavation of 48 1x1-meter units and one 1x4-meter trench. Thirty-nine of the 48 units were grouped into two large block excavations, designated the East Block and the West Block. The West Block, located in the western side yard of the Locust Grove house, consisted of 13 test units. The East Block, located in the front yard of the Locust Grove house, included 26 test units and the 1x4-meter trench (Trench 1). Nine additional units were excavated outside of the blocks to completely investigate front yard deposits.

The research findings from this study largely focus on the historic occupation of the Locust Grove property beginning in the early nineteenth century, and concentrate on historic landscape change and consumer behavior and how these two aspects of material culture reflected and reinforced social/class identity in rural Delaware. The issue of prehistoric settlement at the site is also examined, due primarily to the identification of a pit feature similar in form to others in Delaware that have been attributed variously to human action (Native American construction of pit houses) or natural causes (treefalls).

The majority of the archaeological deposits uncovered in the front and side yards are the result of landscaping activities that occurred over the last quarter of the nineteenth century, both during and after the construction of the Second Empire section of Locust Grove. Several shallow pit

PLATE 3: Locust Grove, 1995

features were also encountered, and a number of these also appear to be nineteenth-century landscaping deposits. In addition, excavation uncovered a mid-nineteenth-century surface in the East Block beneath a layer of rubble fill. This deposit consisted of a thin layer of soil containing a dense concentration of household refuse, including a number of mendable glass and ceramic vessels.

As noted above, one possible prehistoric feature was encountered at the Locust Grove Site. Although a few prehistoric artifacts were recovered during the excavations, none were found in association with the pit feature.

The remainder of this report is organized into nine chapters, plus six appendices. Chapter II contains a description of the site's environmental setting, while Chapter III provides a summary of the Phase I and Phase II investigations conducted at Locust Grove. Chapter IV outlines the research design which guided the data recovery investigations, including a discussion of the research issues pertinent to the site, and a summary of the research methods. Overviews of the regional prehistoric and historic contexts, and the results of the site-specific historical research conducted for the project, are presented in Chapter V. Chapter VI deals with the results of Phase III fieldwork; Chapter VII presents the analytical results and discusses the findings in relation to

the research issues identified for the project. A summary of the project and the conclusions are presented in Chapter VIII. Chapter IX contains the bibliography.

The artifact collections from the site are currently in storage at LBA's archaeology laboratory in East Orange, New Jersey. Original field records, photographs, and other material related to the site have also been prepared for storage with the collection. The artifact collections and associated materials have been prepared for permanent storage in Delaware.

II. ENVIRONMENTAL CONTEXT

The Locust Grove Site is located in the Mid-Drainage zone of the High (or Upper) Coastal Plain of Delaware, south of the Piedmont Uplands (Custer 1984:25; Grettler et al. 1991:7-9) (Figure 2). Situated between the fall line and the Smyrna River, the High Coastal Plain represents the southeastern extension of the very coarse glacial deposits of the Columbia sediments. In many

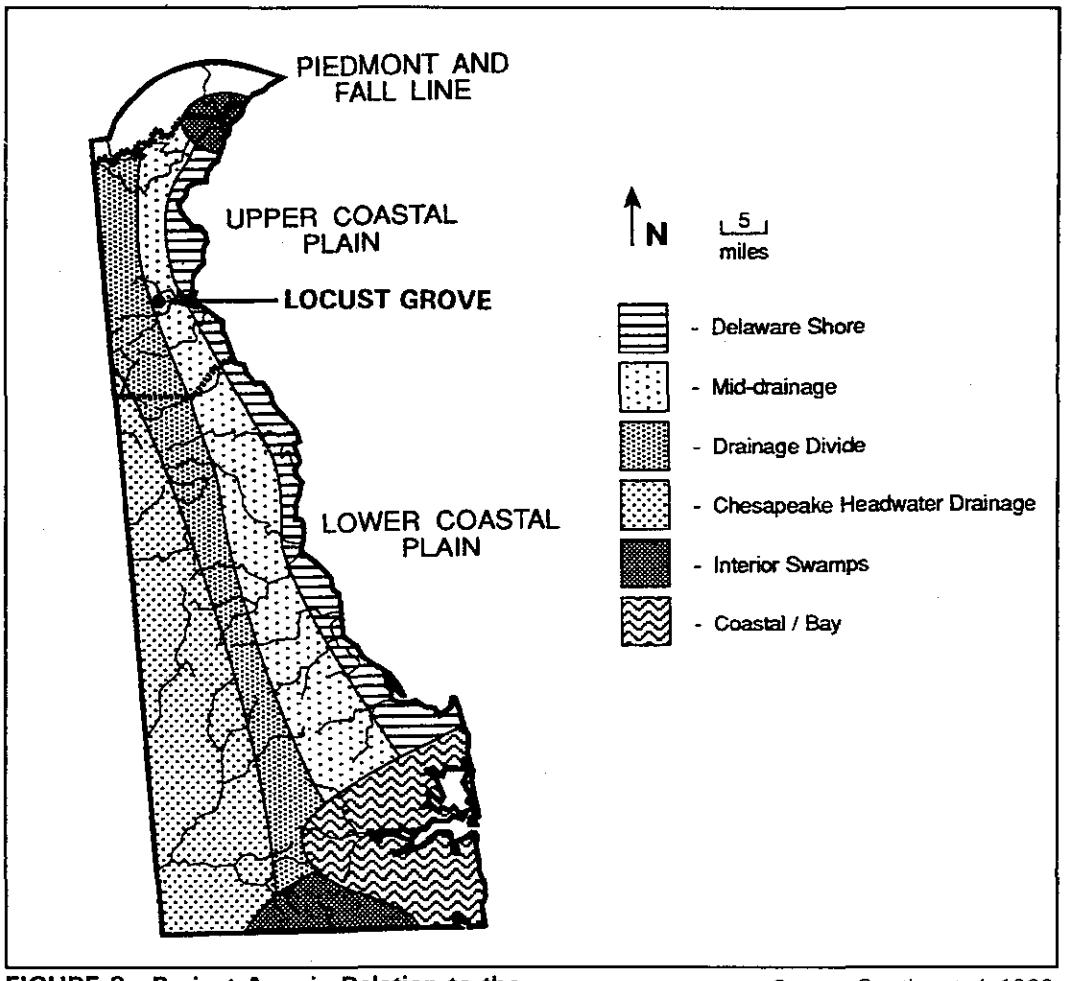


FIGURE 2: Project Area in Relation to the Physiographic Provinces of Delaware *Source: Grettler et al. 1966*

areas of New Castle County, these coarse deposits resisted erosion, creating a rolling topography with up to 16 meters (50 feet) of elevation difference between headlands bordering larger streams and the adjacent floodplain marshes. These differences are sufficient to cause varied distributions of plant and animal species (Braun 1967:246-247). Watercourses tend to be deeply incised and are lined with relatively recent sediments that are thin along the upper reaches of the drainages and become thicker toward their mouths (Mathews and Lavoie 1970). Most streams are not entirely tidal, and the freshwater/saltwater mix allows for a wide range of resources.

Locust Grove is situated near the northern edge of a broad northeast-southwest-trending drainage divide. The terrain in this area is level, with an elevation of about 60 feet above mean sea level. An unnamed tributary of Drawyer Creek is located 2,000 feet to the north of the site, and flows in a northeasterly direction to its confluence with Drawyer Creek, approximately 1.3 miles from Locust Grove. Just over a mile to the south of the site is the Appoquinimink River, a tributary of the Delaware River, which also flows in a northeasterly direction; Drawyer Creek joins the Appoquinimink River roughly 2.7 miles east of Locust Grove.

Soils in the project area have been classified as Matapeake silt loam, silty substratum, 2 to 5 percent slopes. Matapeake soils, which account for 25 percent of the soils in New Castle County, are deep and well drained and are well suited to most crops; erosion, however, is a problem, and in most areas part of the original surface layer has been washed away (Mathews and Lavoie 1970:28-30).

Land use in the vicinity of the project area has been agricultural since the period of initial European settlement during the seventeenth century. Despite an increase in residential development that has occurred over the last two decades (including the construction of the Evergreen Farms subdivision east of Locust Grove), the area between Odessa and Middletown still retains much of its rural character, provided by agricultural fields, pasture, woodlots, and dispersed farmsteads.

III. SYNOPSIS OF PHASE I AND PHASE II TESTING

Archaeological resources at Locust Grove were initially identified during LBA's Phase I survey of the proposed SR 1 corridor, between Scott Run and Pine Tree Corners (Bedell et al. 1997). Since the presence of a nineteenth-century house on the Locust Grove lot was obvious, Phase I testing of the house was directed toward locating intact yard deposits and features. Twenty-eight shovel test pits were excavated around the house at 10-meter intervals (Figure 3). When artifacts were encountered, the interval was reduced to 5 meters. Twenty-one additional shovel test pits were placed in the yards surrounding the house, for a total of 49.

Phase I shovel testing identified an intact midden deposit, containing shell, bones, and large pieces of redware, near the southwestern corner of the house. Two features were also located during testing. Feature 1, a brick walkway, was encountered in a shovel test excavated southwest of the house (Plate 4). It was determined by probing that this walkway connected the front door of the house with the driveway to the east. Feature 2 was a deposit of rubble and sand, up to 50 centimeters deep, located by Shovel Test Pit 8 in the front yard. It was thought that this might represent the foundation ruins of an earlier house on the site.

PLATE 4: Feature 1 (Brick Walkway)

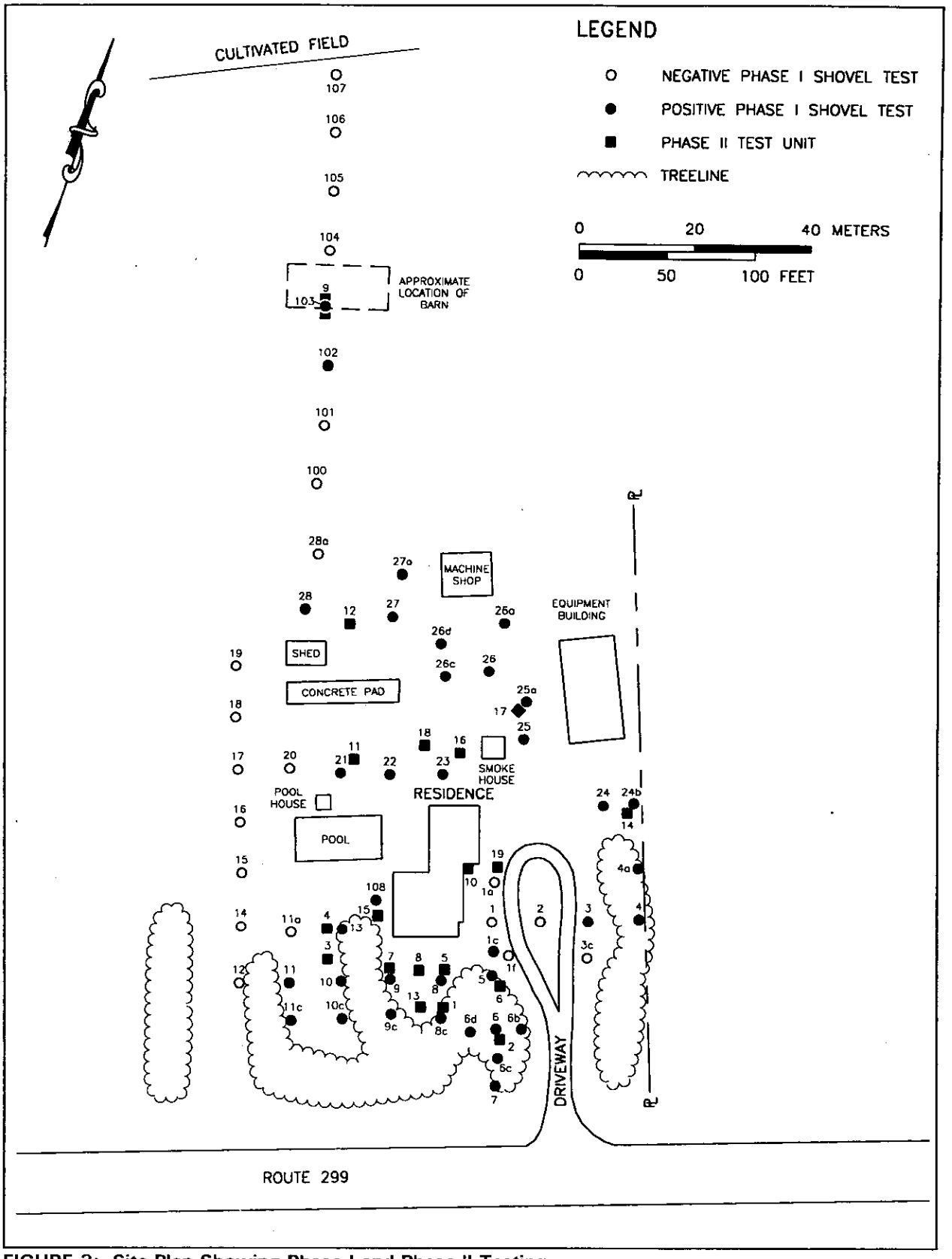
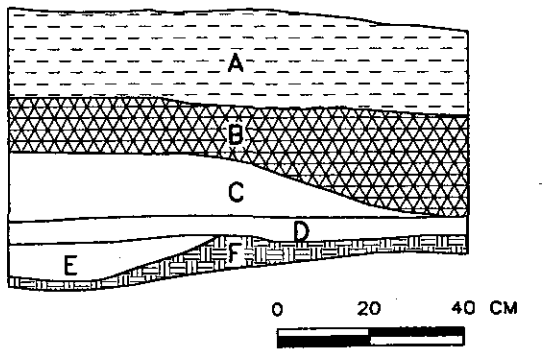


FIGURE 3: Site Plan Showing Phase I and Phase II Testing

Phase II testing of the Locust Grove Site entailed the excavation of 18 1x1-meter test units, one 1x2-meter test unit, and eight additional shovel test pits (see Figure 3). The shovel test pits were excavated in a line running north from the site at 10-meter intervals to search for barns or other outbuildings in the field behind the house. Shovel Test Pit 103, 90 meters (300 feet) north of the house, encountered a fill deposit, and Test Unit 9 was placed in this area. The test unit was widened to 1x2 meters to expose a stone foundation wall. North of the wall was a deep deposit of building debris (the upper portion of which was designated Feature 3), including roofing metal, burned boards, building stone, and wire nails. This deposit, which was interpreted as the remains of an early twentieth-century barn that had been pushed into its interior, was capped by a deposit of clay fill mixed with debris that appeared to indicate the barn had been destroyed by bulldozing. The area outside the foundation, as shown in both the test unit and the shovel test pits, was also disturbed. The soil was mixed fill, probably because it had been repeatedly churned up during use of the area as a truck parking lot. Although barn remains are clearly present, they are disturbed, and no intact ground surface was located in the surrounding area.



LEGEND

A BROWN (10YR 4/3) SILTY LOAM; LANDSCAPING FILL

B YELLOWISH BROWN (10YR 5/6) SILTY CLAYEY LOAM MIXED WITH BROWN (10YR 4/3) SILTY LOAM; POSSIBLE CELLAR FILL

C YELLOWISH BROWN (10YR 5/6) WITH SMALL LENSES OF VERY DARK GRAY (10YR 3/1) SAND; POSSIBLE CELLAR FILL

D VERY DARK BROWN (10YR 3/2) SILTY CLAYEY LOAM WITH YELLOWISH BROWN (10YR 5/6) SAND AND VERY DARK GRAY (10YR 3/1) SAND; YARD DEPOSIT

E DARK GRAYISH BROWN (10YR 4/3) LOAM; FEATURE 2

FIGURE 4: Test Unit 5, East Wall Profile

The remainder of the test units were deployed closer to the house. Test Units 1 through 8, 13, and 15 were excavated in the front yard (see Figure 3). Test Unit 4 exposed more of the intact domestic midden deposit southwest of the house that had been originally encountered in Phase I Shovel Test Pit 13. This midden, buried under 20 centimeters of soil, included quantities of bone, oyster shell, ceramics (largely redware and whiteware), and container glass. The solarized, or amethyst, variety of the latter provided a Terminus Post Quem (TPQ) of 1880 for the deposit. Test Unit 5, south of the house, relocated a deposit of rubble and sand that had been encountered originally in Phase I Shovel Test Pit 8 and had been interpreted as a possible foundation (Figure 4; Plate 5). Phase II testing showed that the deposit was not a foundation, but was related to some building/demolition project, possibly associated with the construction of the new front section of the house in the 1870s. Sealed beneath this deposit was another midden containing household refuse, as well as a small trash pit. Intact deposits containing quantities of domestic material were thus demonstrated to be present in the front yard in at least two places. One of these deposits appeared to date to the mid-1800s, the other to the last quarter of the nineteenth century.

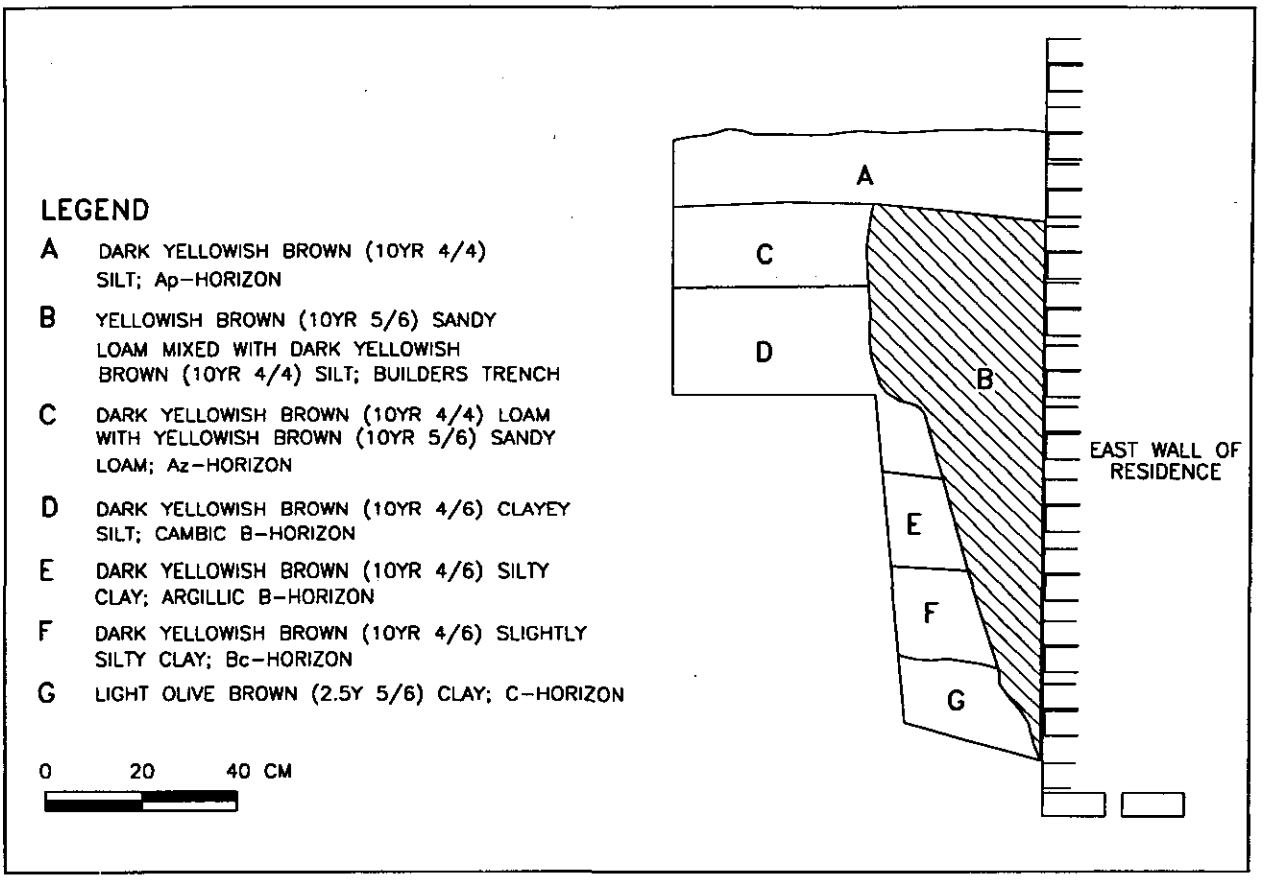


FIGURE 5: Test Unit 10, South Wall Profile

Test Unit 10 was placed against the eastern brick foundation wall of the older, rear section of the house to investigate the backfilled exterior portion of its cellar hole (i.e., the filled gap between the foundation and the side of the cellar excavation) and any adjacent deposits (see Figure 3; Figure 5). No domestic deposits were encountered in this area, and the exterior, filled, portion of the cellar excavation was completely sterile. The absence of artifacts in the fill adjacent to the early nineteenth-century house foundation, coupled with the lack of artifacts from the yards dating to earlier periods, strongly suggested that this was the first house on the site. Test Unit 19 was excavated 4 meters east of Test Unit 10 and encountered a layer of redeposited subsoil, possibly from the cellar excavation of the early section of the house; this deposit was nearly sterile, however, and was not capped with domestic deposits.

The test units in the rear of the house were less interesting than those in the front yard. Test Unit 11, northwest of the house, encountered a brick walkway, probably of recent date. Test Units 16, 17 and 18, excavated near the nineteenth-century smokehouse, recovered large quantities of artifacts, but this material all appeared to date from the twentieth century. Test Unit 12, located 30 meters (98 feet) north of the house, was nearly sterile, while Test Unit 14, 30 meters (98 feet) east of the dwelling, in front of the equipment shed, encountered part of an asphalt driveway and yielded predominantly twentieth-century material.

PLATE 5: Feature 2 (Refuse Deposit)

In summary, Phase II testing at Locust Grove located intact, artifact-bearing deposits at three places in the yards surrounding the house. The deposits to the rear of the dwelling, centered on the nineteenth-century smokehouse, were dated to the twentieth century by finds of plastic and other recent material. The deposits in the front yard were sealed by a layer of debris that might be associated with the construction of the major addition to the house in the 1870s. These deposits, which included large ceramic sherds, mammal bone, and oyster shell, were considered to date to the period from 1830 to 1870. West of the house, a second domestic deposit was located that appears to date to the late nineteenth century. Testing of the backfilled exterior portion of the early nineteenth-century cellar hole showed that it was sterile, strongly suggesting that the Greek Revival portion of the house was the first dwelling on the site.

IV. RESEARCH DESIGN

A. INTRODUCTION

Based on the results of the Phase I and II investigations, the Locust Grove Site was considered eligible for the National Register of Historic Places under Criterion D. The previous investigations had indicated that the site would provide an opportunity to study the farm life of an elite St. Georges Hundred household in the mid- to late nineteenth century and to address several questions/issues of interest to historians and archaeologists. A data recovery plan was prepared to provide an overarching research framework for the Phase III investigations, the principal goal of which was to recover archaeological and historical data on the organization of space at Locust Grove, the foodways and consumer behavior of the site's occupants, and their economic and social standing in the rural community of St. Georges Hundred.

Also providing structure for the research was the program outlined in the *Management Plan for Delaware's Historical Archaeological Resources* (De Cunzo and Catts 1990), which consists of three intersecting components: time, space, and research theme. Of the five time periods defined in the plan, two are applicable to the occupation of Locust Grove—1830-1880 Industrialization and Early Urbanization, and 1880-1940 Urbanization and Early Suburbanization. Geographically, the site falls into the Upper Peninsula zone. Two of the four research themes outlined in the Management Plan were considered to be especially pertinent to the investigations at Locust Grove, i.e., Landscape, and Domestic Economy (or consumer behavior).

B. RESEARCH ISSUES

1. Landscape

Landscape studies, which have increasingly become a focus of research in historical archaeology (Adams 1990; Beaudry 1986; Kelso and Beaudry 1990; Leone 1989; Praetzellis and Praetzellis 1989; Rubertone 1986), examine issues related to the cultural modification of the environment and the use of space. The landscape, which includes buildings, activity areas, and the pattern of fields, woodlots, and roads (as well as natural features), is shaped by humans and is the stage upon which they conduct their lives. Landscapes are altered in response to changing economic conditions (shifts in the regional agricultural regime, for instance), or to conform to cultural perceptions of what the world should look like. Like other elements of material culture (clothing, furniture, or sets of ceramic dishes), the landscape is invested with meaning, and it is to the issues of meaning and symbolism, human perception and experience of landscape, that historical archaeologists are increasingly turning their attention (Yamin and Metheny 1996:xiii-xx). House forms, decorative trim, the placement of gardens, and so forth, are not simply reflective of social and economic status, but are also expressions of social or class identity, and "can be viewed as active components in the creation and recreation of social relations" (Gibb 1996:21). Material objects can be used to emphasize social or class differences or, conversely, can be employed to

mask the contradictions inherent in social and class relationships. The elements of landscape, and other forms of material culture, also express and reinforce the relationships of gender and generation (i.e., parents and children) within the household (McMurry 1988; Rotman and Nassaney 1997; Spain 1992; Weber 1996). As Glassie (1982) has emphasized, material culture is interactive as well as reflective and plays a role in mediating social interaction (see also Carrier 1995), a concept that Herman (1987, 1992) has employed in his studies of architecture and rural life in Delaware in the eighteenth and nineteenth centuries. For Herman, architecture is oriented in large measure toward the community. In other words, material culture is used to express identity to others outside the household and to mediate social interaction between the household and the outside world (Herman 1987). James Gibb, on the other hand, in his recent study *The Archaeology of Wealth: Consumer Behavior in English America* (1996), argues that the decisions regarding the acquisition and use of material culture were, in large part, directed inward, representing the household's dialogue with itself "about membership, identity, power relations, and mutual reliance and affection" (1996:4).

During the eighteenth century, new intellectual and social norms emphasizing order, cleanliness, and the separation of public and private spheres developed in Europe, and are referred to in the Anglo-American context as Georgian (Deetz 1977). By the middle of the century, the Georgian worldview, or mindset, had begun to influence nearly every aspect of the cultural environment of British North America (Deetz 1977, 1988), including the use of space. Georgianization was the gradual transition from a communal, medieval ideology to a rationalist system characterized by individualism, empiricism, and a symmetrical ordering of the cultural environment. This worldview had become generally accepted in England prior to its introduction into the colonies, where it spread inland from the eastern seaboard with the rise of merchant capitalism during the course of the eighteenth century (Leone 1989). Georgian material traits became increasingly relied upon for status advertisement and the creation and recreation of social identity by the colonists who, according to Bushman (1992), thus associated themselves with the English aristocracy as the century progressed. According to Deetz, the Georgian worldview is discernible through various interpretations of the archaeological record, including, although not limited to, the introduction of matching ceramic sets, forks, individualized cuts of meat, and the expansion in the variety of household furnishings. The landscape was also affected, with the construction of symmetrical, center-passage plan houses, and the use of trash pits instead of the disposal of refuse across the yard areas surrounding the house (Deetz 1977; Palkovich 1988).

In his study of architectural change in Delaware, Bernard Herman (1987) has observed trends broadly similar to those noted above. By the 1740s, for example, the Georgian-influenced center-passage plan began to be accepted by Delaware's rural elite, whose adoption of this new form expressed their identity as increasingly separate from that of the community at large (Herman 1987:27-28). As Herman points out, by the end of the eighteenth century, there was a distinct relationship between the emergence of well-defined social classes and architecture (Herman 1987:39-40).

Over the course of the nineteenth century, Georgian conceptions of order and refinement spread into the middle class, brought about by (and in some ways driving) the expansion of the capitalist

market (Bushman 1992; Sellers 1991), and ultimately developing into the ideology of proper home life that has come to be called Victorian. On rural middle-class properties, the external marks of refinement included the construction of vernacular forms of Greek and Gothic revival houses (followed, by mid-century, by Italianate and Second Empire styles), the planting of ornamental shrubs and trees, construction of new types of agricultural outbuildings, and the creation of formal front yard spaces.

The rise of a rural middle class in St. Georges Hundred during the nineteenth century mirrored, in many ways, developments elsewhere in the Middle Atlantic region, and corresponded to the transformation of traditional agriculture in Delaware. During the first decades of the century, many of the less productive farms in southern New Castle County were abandoned, following a protracted economic downturn, and were absorbed into the holdings of more successful farmers (De Cunzo and Garcia 1992). During this same period, the agricultural reform movement was aggressively advocating scientific farming and the concept of agriculture as industry (Herman 1987; McMurry 1988). Reform-minded and increasingly capitalistic farmers in southern New Castle County embarked on a rebuilding program in the second decade of the nineteenth century that transformed the rural landscape. During the 1820s, older houses were expanded, but by the following decade, building projects more frequently entailed new construction, a trend that continued into the 1870s (Herman 1987). These new houses (of which Locust Grove was one) incorporated the new ideas of segmented spaces and functional specificity. By mid-century, in Delaware and elsewhere in the Middle Atlantic region and the Northeast, the middle-class farmhouse had come to embody the separation of domestic work from farm work and was an expression of gentility, propriety, and economic success (Bushman 1992; McMurry 1988).

In addition to houses, the transformation of the rural landscape in the nineteenth century encompassed the farm buildings as well as the yard areas in the farmstead's domestic core. As Herman (1987) observes, new agricultural buildings were constructed that were, ideally, designed to house a number of specific functions beneath a single roof—the factory concept applied to the farm. Herman goes on to note that these buildings "became the primary vehicles that individual farmers used to communicate the new values of the agricultural reform movement and the character of each particular farm in southern New Castle County" (Herman 1987:199). These new values were not always wholly embraced, however; the space inside these new structures was often underutilized, and some farmers continued to build specialized outbuildings for specific functions (Herman 1987:215).

The refinement of yard space, particularly the area between house and road, went hand-in-hand with the construction of the genteel, stylish, and spatially segmented middle-class farmhouse. Yards were sometimes fenced, and were usually landscaped to present a formal and often extensive buffer zone between the public road and the family's private space (Bushman 1992). Like the house, the yard was, ideally, designed to present a refined outward expression of gentility. The disposal of household refuse was now usually conducted out of sight behind the house, often well away from the domestic center of the farmstead. However, the ideal did not always conform to the reality, and some farm households continued to use the yards immediately adjacent to the house for refuse disposal (Affleck 1996).

The Phase II data recovered from the Locust Grove Site suggested that much of the area surrounding the house, including the rear yard, had been disturbed by twentieth-century activities. Apparently intact refuse deposits, however, were uncovered in the front yard. A principal goal of the data recovery investigations was, therefore, the reconstruction of the front yard at the Locust Grove Site, in order to determine how changes in yard layout reflected changes in the lives of well-to-do St. Georges Hundred inhabitants and, if possible, to correlate these changes with broader social trends in nineteenth-century American society (Deetz 1977).

2. Domestic Economy

Simply put, the research domain of domestic economy, as defined by De Cunzo and Catts (1990), encompasses the range of means–including production, reproduction, and consumption–employed by a family or household to achieve its goals. As De Cunzo and Catts (1990:17) have noted, these goals might include simple survival; geographic, occupational, economic and/or social mobility; and/or may be inspired by religious beliefs and values or other ideologies. Production, reproduction, and consumption can therefore be seen as a strategy designed to achieve the family/household's domestic goals. This domestic strategy is composed of several elements amenable to historical and/or archaeological investigation. These elements include the composition and occupational structure of the household (a critical, and largely a historic, issue); home production (of shelter, food, clothing, and other necessities, together with surplus products for market); and consumer behavior, a topic that has become a major focus in historical archaeology (e.g., Cook et al. 1996; Cressey et al. 1984; Henry 1991; Klein and Garrow 1984; LBA 1986, 1990a, 1990b; Spencer-Wood 1987; Wise 1984). The latter can be broadly defined to include participation in a local barter economic system and/or a cash-based market economy (De Cunzo and Catts 1990:17). Of particular relevance in terms of consumer behavior are the family/household's investment in, utilization of, and improvements to, commodities such as land and/or architecture in order to meet its goals; it is here where the research domains of domestic economy and landscape intersect. Attention should be paid as well to the household's investment in equipment and tools, furnishings, and goods such as ceramics, clothing items, and bottled products (such as wine, spirits, or condiments).

Home production is also critical for gaining an understanding of the domestic strategies of rural populations. How self-supporting were nineteenth-century farm households? How tied to the market were they, and what was the effect of the commercialization of agriculture over the course of the nineteenth century? Evidence of foodways (faunal and flora remains, and artifacts associated with food preparation, storage, and consumption) can be particularly useful in enhancing understanding with regard to the self-sufficiency of nineteenth-century households, especially through the analysis of butchering patterns and the distribution of faunal elements. Through the examination of self-sufficiency and market participation, it should be possible to place the household in local, regional, and international economic contexts.

For middle-class farm households, a principal goal had always been to maintain a degree of economic independence. As the nineteenth century progressed, and farmers became more market-oriented (see Clark 1990), the desire for independence had to a greater or lesser extent been

translated into a "drive for income," as Michel (1984) terms it. Material objects, the most obvious of which were farmhouses and outbuildings, became, in Herman's words, "monuments to economic and social success. Aspirations to social class could be worked out in brick, lumber, plaster, and paint: the social revolution would become an architectural revolution" (Herman 1987:116). St. Georges Hundred farmers' aspirations to social class could also be worked out in the form of more portable items, such as transfer-printed teawares or parlor furnishings. Material goods, as noted earlier in the discussion of landscape, thus both expressed and reinforced social, gender, and class identities, and certain items—extensive matched dinner sets, for example—came to symbolize middle-class Victorian refinement and respectability (Wall 1991).

C. METHODOLOGY

1. Archival Research Methods

The Phase I and II archival research conducted by Bedell et al. (1997) provided the basic chronology for the Locust Grove Site, as well as the local and regional contexts within which the property was embedded. This work included both general research on the economic and social history of New Castle County and site-specific research on the history of Locust Grove. A chain of title was prepared for the property, using the current owner, tax information in the New Castle County Tax Assessment Office, and the will, probate, and Orphans' Court records kept on microfilm at the New Castle County Chancery Office. U.S. census records for the site were consulted on microfilm at the Morris Library of the University of Delaware. The marriage catalog, tax assessment records of St. Georges Hundred, and road returns were consulted at the Delaware State Archives. Genealogical and background material was consulted at the Historical Society of Delaware in Wilmington, the Dover Public Library, the Wilmington Public Library, and the Odessa Public Library. Additional work conducted for the Phase III investigations included the compilation of agricultural census data from St. Georges Hundred for comparative purposes, and the examination of local tax assessments from the nineteenth century.

2. Phase III Field Methods

The program devised for data recovery was based on a sampling plan that included two principal components: 1) excavation of block areas centered on productive loci identified during the Phase II fieldwork, and 2) exploratory excavations to provide a better spatial sample of the area in front of the house. Prior to the commencement of fieldwork, a grid oriented to the compass bearing N6°W was established across the front and side yards of Locust Grove. This grid alignment guided the orientation of each of the test units and the two block excavations. Grid coordinates were assigned to both test units and archaeological features.

Based on the Phase II testing, two areas were identified for the expansion of block excavations (Figure 6). The first of these, identified as the East Block, was located in the front yard immediately south of the house and centered around Test Unit 5, which encountered nineteenth-century refuse deposits sealed by several landscaping strata. The second area, designated the West Block, was located in the western side yard and centered on Test Unit 4, which had uncovered a midden or refuse deposit that appeared to date to the late nineteenth century.

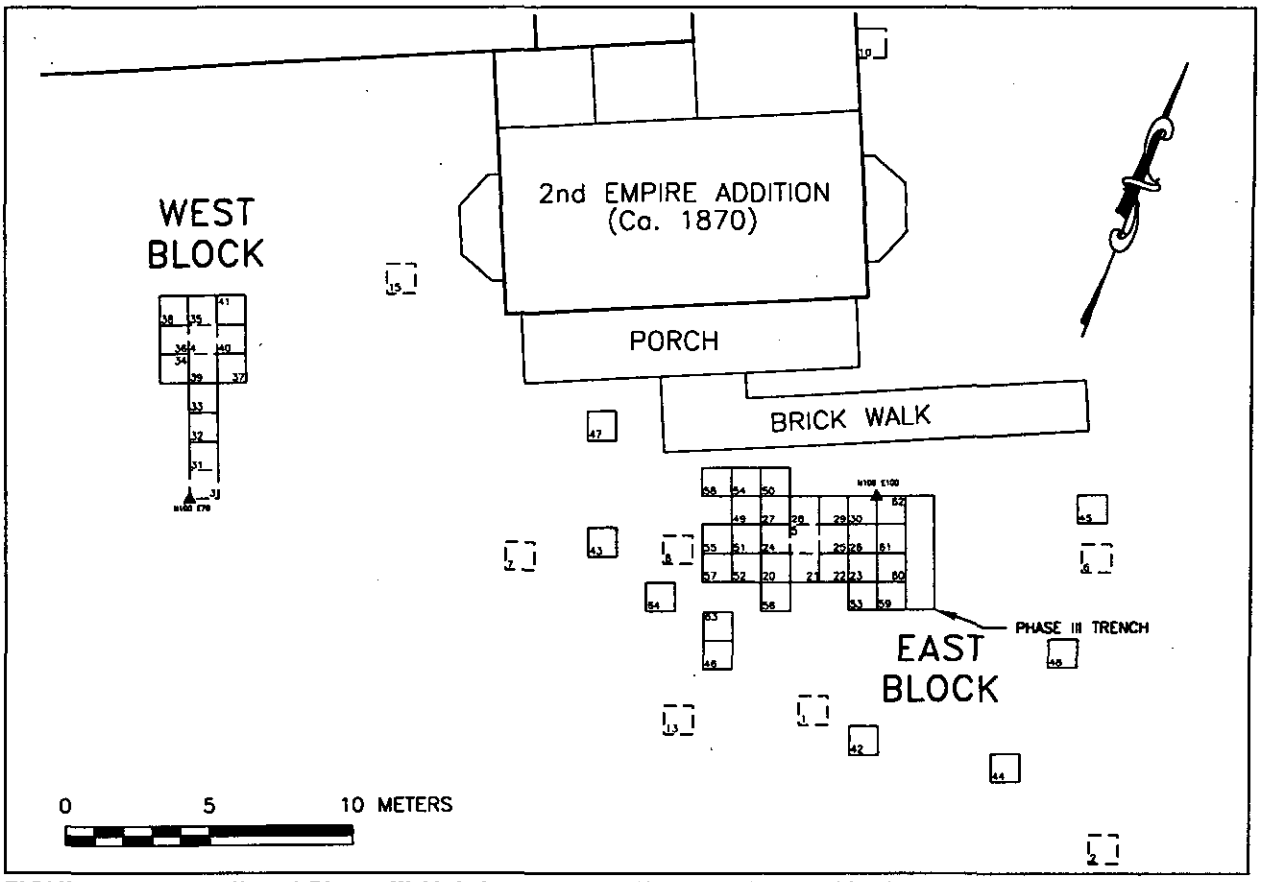


FIGURE 6: Phase II and Phase III Unit Locations in Front and West Yards

Several exploratory units were scattered across the front yard, between the house and road, to obtain a more representative sample of the stratigraphic deposits in this portion of the site. Reserve units were employed to expand the block excavations around significant deposits or features.

The Phase III field effort included 48 1x1-meter test units and a single 1x4-meter trench, totaling 52 square meters of excavation. Altogether (including the Phase II fieldwork discussed in Chapter III), 72 square meters were excavated at the Locust Grove Site. Excavation was conducted according to natural or cultural strata; all excavated soils were screened through 0.25-inch hardware mesh and were recorded using USDA textural classifications and Munsell soil color notations. Feature and soil profiles were drawn to scale, and photographed using black-and-white and color film. Soil samples were taken from features and selected stratigraphic contexts for flotation and soil chemical analysis. A number of soil samples were also taken for dating using the Oxidizable Carbon Ratio (OCR) procedure.

3. Data Analysis Methods

A substantial artifact collection from the site had already been processed and analyzed for the preceding Phase I and Phase II studies. In order to take full advantage of the existing analytical

information, the artifact processing and analysis for the data recovery program followed the same overall laboratory procedures. This allowed integration of new information into the database already established for the site.

The artifact collections were processed for eventual storage and curation by the Delaware State Museum. Artifacts were assigned accession number according to the system utilized by the Island Field Museum. The assigned accession numbers for Site 7NC-F-73 are as follows:

Accession Number	*Phase*
95/0017	I
96/0022	II
95/0079	III

In addition to the accession numbers, unique catalog numbers indicating field provenience within the site were also assigned. The overall laboratory treatment of the collection included (1) basic processing—cleaning and packaging in appropriate containers, (2) cataloging and analysis according to LBA's in-house analytical system, and (3) preparation of the collection for permanent curation, according to the standards of the Delaware State Museum.

Artifact cataloging and tabulation were accomplished by a computerized database system developed by LBA. The database was developed using the MicroRim, Inc., R:BASE System V relational database software package, which runs on IBM-compatible microcomputers. The overall database for the Locust Grove project contains four principal files: (i) provenience, (ii) historic artifacts, (iii) prehistoric artifacts, and (iv) faunal and floral material. An overview of the information in the principal files is presented below.

Complete field provenience information was included in the provenience file: *Catalog Number*, *Site*, *Unit*, *Stratum*, *Level*, *Feature*, and *Feature Level*. The majority of these fields were taken directly from the field excavation records and are therefore self-explanatory. During fieldwork, a sequence of catalog numbers was assigned to the provenience list, so that each unique provenience could be identified by a single number. Additional fields to identify excavation blocks and interpreted stratigraphic units were subsequently added to the provenience table to facilitate analysis of intrasite patterning.

Historic artifacts were cataloged according to standard typologies (e.g., Noël Hume 1970; South 1977), using the class, type, and variety approach (for example, class=glass, type=bottle, variety=case). The entire collection was first sorted according to major classes—ceramics, curved glass, pipes, and small finds. The small finds class is a residual or catch-all category that includes a broad variety of items, including artifacts assignable to South's (1977) Architectural, Furnishings, Arms, Personal, Clothing, and Activities groups. Cataloging of the ceramics and glass was, for the two block excavations, carried to the level of vessels, with crossmends and Minimum Number of Vessel determinations made. For the remainder of the assemblage, the cataloging of glass and ceramics was carried only to the level of individual sherds, rather than vessels, and no crossmends or Minimum Number of Vessel determinations were made. Some

of the attributes—date ranges, for example—were automatically entered by the computer for commonly encountered artifact types. Data processing speed and storage were enhanced by the use of alphabetic and numeric codes for the various attributes, but more lengthy "translations" can be generated as well, particularly for printing catalog sheets. For example, the code "CRP 50" translates to "Ceramic, pearlware, transfer-printed, blue, with stipple," with an automatically entered date range of 1815 to 1840.

Dating of deposits was accomplished primarily by the Terminus Post Quem (TPQ) technique, using the beginning date of manufacture for artifacts with a known temporal range. Mean Ceramic Dates (MCD) were also computed for deposits with a substantial number of datable ceramics. The MCD dating technique theoretically provides a date that corresponds to an assemblage's median date (South 1977), and is a useful tool for comparison of assemblages between sites or of different deposits within a site.

The cataloging of prehistoric lithic artifacts was also carried out according to a technomorphological analytical approach; that is, artifacts are grouped into classes and then further divided into types based upon key morphological attributes, which are linked to or indicative of particular stone-tool production or reduction strategies. However, a function(s) can be assigned to each artifact class and type. Data derived from experimental and ethnoarchaeological research are relied upon in the identification and interpretation of artifact classes and types. The works of Callahan (1979), Clark (1986), Crabtree (1972), Flenniken (1981), Gould (1980), and Parry (1987) are drawn upon most heavily.

Faunal remains were weighed, measured, and cataloged according to species, where identifiable, and element. Any modifications by butchering, burning, gnawing, or breakage were noted. In most instances, many of the bone fragments could not be identified at the species level. Mammal bone that could not be speciated was, therefore, categorized according to size range. The percentage distributions of faunal remains at Locust Grove are based on the enumeration of skeletal elements rather than on estimates of Minimum Numbers of Individuals or the percentage of available meat.

Cataloging and analysis of the floral material samples were completed by a consultant, and the catalog was subsequently integrated into the overall database. For each specimen, the recorded data include species identification, count, weight, and other modification. Cataloging procedures used for the floral material are described in Chapter VII.

V. CULTURAL CONTEXTS

A. REGIONAL PREHISTORY

The prehistory of Delaware has been divided into four periods: the Paleoindian period (ca. 12,000 BC-6500 BC), the Archaic period (ca. 6500 BC-3000 BC), the Woodland I period (ca. 3000 BC-AD 1000), and the Woodland II period (ca. AD 1000-AD 1650). The time frame between AD 1600 and approximately AD 1750 marks the final years of Native American occupation of the area, during early European colonization of the state (Custer 1984, 1986).

The Paleoindian period (ca. 12,000 BC-6500 BC) marks the initial occupation of the state by small groups of nomadic Native American hunters and gatherers. Their presence coincided with the transition from ameliorating late Pleistocene glacial environmental conditions to the onset of early Holocene conditions, with cool temperatures and alternating levels of precipitation. The economic system of the Paleoindians was based largely upon the hunting of large, cold-adapted animals, including both migratory and non-migratory species. Although direct evidence of Paleoindian use of non-mammalian food resources is lacking in the archaeological record of Delaware, paleoenvironmental data indicate that their exploitative territories included habitats in which plant foods and other edible resources were available. Palynological and geomorphological data suggest that the vegetation in Delaware during the Paleoindian period consisted of a mosaic comprised of deciduous and boreal forests and grasslands that would have provided grazing, browsing, and shelter for a variety of small and large mammals. Where they coincided with surface water settings, these habitats would have been focal points for Paleoindian foragers.

The stone toolkit of the Paleoindians was characterized by a limited number of bifacial and unifacial implements that suggest a heavy emphasis on the procurement and processing of animal resources. These include projectile points, hafted and unhafted knives, scrapers, and less formalized flake tools. Of these, the fluted point is the diagnostic hallmark of the Paleoindian period. Other point styles indicative of the later part of this cultural period include both unfluted triangular forms and notched and stemmed points. The distributions and environmental settings of Paleoindian sites and isolated point finds suggest that these people maintained a lifestyle that consisted of relatively frequent movements of single or multiple family groups to and from resource-rich habitats. It appears that this basic settlement/subsistence strategy persisted with only minor variations for approximately 5,500 years.

Custer has identified a concentration of Paleoindian sites along the Mid-Peninsular Drainage Divide of the Delmarva Peninsula. Using modern LANDSAT imagery, Paleoindian site loci were found to be strongly correlated with poorly drained or swampy areas. The Hughes Complex in Kent County exemplifies this Paleoindian site distributional pattern. This complex includes a series of six surface finds located on low, well-drained knolls within or adjacent to a large freshwater swamp and other poorly drained areas (Custer 1986:49-51).

The Archaic period (ca. 6500 BC-3000 BC) is characterized by a series of changes in prehistoric Native American technologies, subsistence, and settlement. These shifts are interpreted as gradual human responses to the emergence of full Holocene environmental conditions. The landscape was dominated by mesic oak and hemlock forests. Reductions in open grasslands brought about by warm and wet conditions resulted in the extinction of certain cold-adapted grazing animal species (i.e., caribou and bison) that were the favored prey of Paleoindian groups. Alternatively, these vegetational changes were favorable to browsing animals, such as deer, which flourish in such settings (Custer 1984, 1986).

A rise in the sea level and an increase in precipitation at the beginning of the Holocene would have facilitated the development of inland swamps within the Mid-Peninsular Drainage Divide. At that time, Native American populations in these locales shifted from the more hunting-oriented foraging pattern of the Paleoindian period to one in which plant foods became a more important part of their economies. In southern Delaware, large swamp habitats such as Cedar Swamp and Burnt Swamp would have served as locations for the first large residential base camps, possibly occupied by several different family groups. Associated with these larger group camps are more numerous and smaller procurement sites situated in various settings that would have been favorable for hunting and gathering activities during different seasons of the year.

Archaic toolkits differ from those of the Paleoindian period in that they include a number of artifacts indicative of plant food processing (i.e., grinding implements and stone mortars). Although Archaic groups in Delaware appear to have been less mobile than Paleoindian populations, they were more mobile than later Woodland period groups. The sizes of Archaic exploitative groups seem to have fluctuated seasonally and with the availability of food resources.

Based upon palynological and geomorphological data from the Middle Atlantic region, the Woodland I period (ca. 3000 BC-AD 1000) has been described as a time of "dramatic change in local climates and environments," in which "a pronounced warm and dry period" (i.e., a mid-postglacial xerothermic) began at approximately 3000 BC and persisted to approximately 1000 BC (Custer and Bachman 1984). During that period, the mesic oak-hemlock forests of the Archaic were replaced by more drought-resistant (xeric) oak and hickory forests and more abundant grasslands. Although these conditions resulted in the drying up of some interior streams, continued sea level rise resulted in the creation of large and highly productive brackish marshes. In essence, the xerothermic is hypothesized to have caused shifts in the distributions of plant and animal species and the establishment of new resource-rich settings in some areas of the state.

In turn, these proposed shifts in climate, environmental conditions, and resource distributions are believed to have resulted in radical changes among resident prehistoric Native American populations in the study area, including a trend toward greater sedentism and more complex systems of social organization and interactions. For example, major river floodplains and estuarine swamp habitats became the primary resource zones and the locations of large residential base camps occupied on a multiseasonal or year-round basis. Such sites are particularly prominent in northern Delaware; they include the Delaware Park Site, the Clyde Farm Site, the

Crane Hook Site, and the Naamans Creek Site. Artifact assemblages and features from these sites suggest intensive utilization by prehistoric populations and a trend toward more sedentary lifeways. In southern Delaware, there was an increase in the utilization of shellfish in the coastal areas, concurrent with an inland shift in the locations of macroband base camps along the tidal drainages. Within the Mid-Peninsular Drainage Divide zone, there is little evidence that site distribution patterns changed from the preceding Archaic period (Custer 1986).

The toolkits of Woodland I groups contrast with those of the Archaic by the addition of such items as heavy woodworking tools, soapstone and ceramic containers, broad-bladed points, and netsinkers. The increased abundance of plant-processing tools over the preceding period suggests more intensive utilization of plant foods, which by the end of Woodland I times may have approached the level of productive intensification. The presence of nonlocal lithic materials such as argillite, rhyolite, and soapstone is interpreted as an indicator of incipient regional trade and exchange networks. Soapstone and ceramic vessels are viewed as items that facilitated more efficient food preparation and storage of surplus foods. Pit features employed for food storage and the remains of prehistoric dwellings have been documented at the Delaware Park and Clyde Farm sites in northern Delaware.

The inferred reduction in overall group mobility, the presence of certain artifact types indicative of intensified resource processing, the possible generation of food surpluses, the presence of artifact caches, and the possible existence of increased interregional exchange networks as inferred from the presence of nonlocal lithic raw materials, are interpreted as indicators of the initial development of ranked social organization as opposed to earlier egalitarian systems.

The Woodland II period (ca. AD 1000-AD 1650) within the Middle Atlantic region is marked primarily by the development of horticulture and increased sedentism. During this period, villages became larger and more permanent and tended to be located adjacent to areas with easily worked floodplain soils. This period is also characterized by a reduction in the interregional trade and exchange systems.

Two Woodland II complexes have been defined for Delaware. In southern Delaware, the Slaughter Creek Complex is characterized by the presence of Townsend ceramics, triangular projectile points, large macroband base camps, and possibly fully sedentary villages with numerous food storage features. Most major sites assigned to the Slaughter Creek Complex have been identified in the Delaware Shore, Mid-Drainage, and Coastal/Bay physiographic zones of southern Delaware. In northern Delaware, Custer calls the dominant Woodland II culture the Minguannan Complex (Custer 1989:311-316). The identifying characteristics of this complex include Minguannan ceramics (a hard, grit-tempered, high-fired variety similar to Potomac Creek), small triangular points, and frequent storage pits. Although agriculture and settled village life developed in this period in southern Delaware and in the Middle Atlantic region generally, there is no evidence of either of these important changes in northern Delaware. The large sites of the Woodland II period in northern Delaware are in the same environmental contexts as those of earlier periods, oriented toward wetlands rather than toward good agricultural land. In many cases, earlier sites continued to be occupied in the Woodland II period, including the Hell Island,

Delaware Park, and Clyde Farm sites (Custer 1984; Thomas 1966, 1980). The evidence suggests that there was no major change in lifeways in northern Delaware in this period, and that the inhabitants continued to rely on hunting and gathering, especially in marsh areas, for their sustenance. Ethnographic data about the Lenape, who occupied the area at the time of European contact, tend to support this conclusion (Stewart et al. 1986; Weslager 1972).

The Contact period (ca. AD 1600-AD 1750) is marked by both the initial contact between the Native American inhabitants of Delaware and European colonists, and the total collapse of traditional native lifeways and sociopolitical organization. The picture is further complicated by the paucity of sites dating to this important period within the state. However, historical sources indicate that resident Native American populations had minimal interaction with European settlers and were subjugated by the Susquehannock Indians of southern Lancaster County, Pennsylvania. A small number of descendants of the original Native American inhabitants of Delaware still reside in the state today.

B. REGIONAL HISTORY

In 1638, Swedish settlers established Fort Christina, at the confluence of the Christina River and Brandywine Creek in what is now Wilmington, Delaware. Fort Christina, the first permanent European settlement in Delaware, soon became the nucleus of scattered settlements of Swedish and Finnish farmers known as New Sweden (Coleman et al. 1987:19). In 1651, the Dutch established Fort Casimir, near present-day New Castle, Delaware, in an attempt to block Swedish efforts to control commerce on the Delaware River (Hodny et al. 1989:19). In 1657, as a result of peaceful negotiations, the City of Amsterdam acquired Fort Casimir from the West India Company and established a city called New Amstel (New Castle) nearby (Coleman et al. 1987:19).

English rule of the region began in 1664, when Sir Robert Carr attacked the Dutch settlement at New Amstel. Former Dutch magistrates continued in office under English authority, and Swedes, Finns, and Dutch all accepted the rule of the Duke of York through his appointed governors. In 1682, the granting of proprietary rights to William Penn and his representatives gave economic and political control of Delaware to Philadelphia, which became the new seat of government for the region (Munroe 1978, cited in Coleman et al. 1987:21).

Dutch land grants were characteristically laid out in narrow strips from stream to stream, forming a distinctly recognizable land pattern. This pattern of development was already in place on the neck between Appoquinimink and Drawyer creeks when the English took over the Dutch colonies in 1664. Appoquinimink Neck attracted early Dutch and Swedish settlers because of its location on a trade route between the Dutch Delaware River settlements and the English Chesapeake Bay settlements. The primary trade item was Maryland tobacco. In about 1660, a road was laid out as a portage between Bohemia Creek, which drained into the Chesapeake Bay, and landings on Drawyer and Appoquinimink creeks, which drain into the Delaware River. The head of navigation on Bohemia Creek developed into the settlement of Bohemia Mills, Maryland. Just five miles to the east was the uppermost landing on Appoquinimink Creek, at Silver Lake, to

which a branch of the cart road was laid. The main Bohemia Cart Road, also known as "Herman's Cart Road," is the antecedent of Route 299, the road linking Middletown to Odessa (Scharf 1888:991).

A Dutch government official, Alexander De Hinijossa, was in the process of establishing his residence on a plantation on the site of Odessa when the English took control. Confiscation of his property derailed his plans for establishing a town on Appoquinimink Creek. Not all of the Dutch landholdings were confiscated, however. Because earlier Swedish and Dutch land grants were voided by the English takeover, settlers were ordered to obtain a reconfirmation of their patents. Most of the patents for land in Appoquinimink Neck date to 1671, the year when detailed land records were first recorded in the region.

The Dutch settlement system was gradually replaced by the English colonial settlement pattern of scattered farmsteads along roads, usually granted in 500-acre parcels, with population concentrations living in nearby villages (Coleman et al. 1987:21). In the late seventeenth century, William Penn and his agents aggressively promoted immigration into the Lower Delaware River Valley, resulting in a large number of Welsh and English settlers moving into New Castle County, Delaware. In 1701, a charter formerly separated Delaware's three counties from Pennsylvania (Herman 1987:5).

The two most important towns to develop in St. Georges Hundred were Odessa and Middletown. The nucleus of Odessa's development was a bridge built by Richard Cantwell over Appoquinimink Creek in the 1730s. He was the grandson of Edmund Cantwell, one of Appoquinimink's most wealthy and politically active citizens, who acquired 2,600 acres of land along the southern side of Appoquinimink Creek by the time of his death in 1698. The development of the village at the bridge crossing was further encouraged by the laying out of the lower King's Highway through Odessa in 1764. By 1825, Cantwell's Bridge was an important transshipment point for grain, principally sent to market in Philadelphia. Local citizens felt a change to the name of "Odessa," an important grain port on the Black Sea, was warranted. Odessa's fortunes declined after construction of the Delaware Railroad siphoned off the grain trade (Scharf 1888:1005).

Middletown was founded by Adam Peterson, the Swedish progenitor of a large family whose descendants still live in the area. The first tract, "Middletown," in what became a large plantation was patented in 1678. The old Peterson homestead in Middletown reportedly survived into the present century. In 1761, a tavern was built in Middletown on the old Bohemia Cart Road. A crossroads was created when the upper King's Highway was laid out past the tavern in 1764. A village developed around the crossroads, and by 1800, the population had grown to about 120 (Scharf 1888:993; Watkins n.d.).

During the late eighteenth century, the population of Delaware grew steadily. Delaware's population in 1790 was 59,096. Ten years later, the population had risen to 64,273, with almost the entire increase occurring in New Castle County. The total population of St. Georges Hundred in 1800 consisted of 3,365 persons, 481 of which were slaves and another 484 of which were

categorized as free persons (Rogers and Easter 1960:62). With the population increasing, the number of school-age children also increased. By 1829, St. Georges Hundred had established a public school system (Conrad 1908:547). At that time, new school houses were erected, and old ones which had previously been private schools were converted for public use (Scharf 1888:992).

The earliest industrial pursuit practiced in St. Georges Hundred was gristmilling. Early mills were custom mills, grinding flour for farmers for a fee. These mills are considered a by-product of the agricultural production which was occurring, rather than an early expression of manufacturing within the hundred (Munroe 1954:27). Odessa was the primary grain-milling center for St. Georges Hundred, despite the fact that in the late nineteenth century, Willow Grove Mill was situated approximately halfway between Odessa and Middletown on Appoquinimink Creek.

In 1829, the Delaware and Chesapeake Canal was completed (Reed 1947:377). This waterway was seen as a major transportation improvement for New Castle County and its farming community. New transportation methods and routes, such as canals and railroads, became feasible in part because of the increased population pressures in settled areas and the growing demand for agricultural products (De Cunzo and Garcia 1992:212).

Prior to the mid-nineteenth century, houses built in New Castle County were usually one room or hall-and-parlor plan, and of frame construction (New Castle County Department of Planning 1994:23). Houses of brick construction were usually owned by wealthy individuals. Throughout the nineteenth century, New Castle County houses experienced a general rebuilding and restructuring, which was first seen in 1820 with the incorporation of service wings into the main house block (Herman 1987:2, 8). The significant changes in the architecture of rural New Castle County were more particularly expressed in the way that older frame dwellings and tenements were replaced or rebuilt on new locations (Bowers 1987:13-14). Specifically, from 1820 to 1870, there was much remodeling of existing structures and outbuildings. This included the replacement of old buildings and outbuildings, and the substantial remodeling of recently constructed buildings (Herman 1987:12). The two sections of Locust Grove are an excellent example of this phenomenon.

Landed farmers throughout the area typically maintained village dwellings for themselves in addition to their farmhouses. Samuel Pennington was no exception, owning several houses and lots in Middletown, and maintaining several farms outside of town. Between 1850 and 1860, Middletown grew rapidly. The opening of the railroad to Middletown in the mid-1850s established it as the economic focus of St. Georges Hundred, enabling it to grow from a crossroads village to a large and fashionable town (Herman et al. 1985:125). On February 12, 1861, the town, which supported several banks, a canning factory, a brickyard, hotels, and stores, was incorporated as a municipality (Scharf 1888:994).

By the mid-nineteenth century, the intensive agricultural activity occurring in St. Georges Hundred made it, along with Red Lion and New Castle hundreds, one of the wealthiest hundreds

in Delaware. During this period, larger farms within St. Georges Hundred were cultivating wheat, corn, and oats, and raising cattle for dairy products, meat, and hides (Herman 1987:114).

In an effort to increase production, more farmers were purchasing machinery and employing larger numbers of day laborers. As a result, the wealth the farmers gained was evidenced by the large number of home improvements occurring throughout St. Georges Hundred in the nineteenth century (Herman et al. 1985:8-3).

Between 1830 and 1870, Delaware was the center of peach production in the eastern United States, with farms in St. Georges Hundred producing a large portion of the total yield. This shift in agricultural production occurred in response to the fact that the major grain-producing and milling centers had permanently moved west. To compensate for eroding markets and falling prices, the farmers of St. Georges Hundred turned to orchard crops, especially peaches, as an "agricultural panacea" (Herman et al. 1985:8-5). An 1870 peach blight, known as the "yellows," caused the widespread failure of peach orchards (De Cunzo 1993:21). The peach blight forced late nineteenth-century farmers to diversify their crops, planting grains such as wheat, corn, and oats, and specializing in more perishable market produce (Scharf 1888:982). Some farmers who had devoted all of their resources to peaches never recovered.

Toward the end of the nineteenth century, changes in the agricultural practices of Delaware farmers continued. Responding to the demands of markets in New York, Philadelphia, and Baltimore, many farmers began raising more perishable crops, such as strawberries, apples, tomatoes, and potatoes (De Cunzo and Garcia 1992:27). By 1900, over 50 percent of Delaware's farmers were tenants or sharecroppers. From that point forward, tenancy remained a dominant farming practice in Delaware, with farm owners rarely farming the land or occupying the farmhouse (De Cunzo and Garcia 1992:28).

C. LOCUST GROVE

The site of Locust Grove was in the possession of the Peterson family by the middle of the eighteenth century. The home plantation of Adam Peterson was located on the site of Middletown. Adam Peterson also owned one of the narrow tracts between Appoquinimink and Drawyer creeks, the site of Locust Grove (Figure 7). Adam had five children who lived during the first half of the eighteenth century: Adam, Jr., Andrew, Hermania, Hilitie, and Garret, names which were often repeated among their descendants. Hermania married Matthias Van Bibber, a Maryland merchant. Each of her brothers married a niece of Matthias Van Bibber: Andrew to Hester Van Bibber, and Adam to Veronica Van Bibber Birmingham. Adam Peterson's estate was divided equally between the five children.

Andrew Peterson died in 1740. He had 11 children, and was survived by his third wife, Hester. One of his daughters, Elinor, married Richard Cantwell, the builder of Cantwell's Bridge. Elinor's share of her father's estate was a woodland tract of 125 acres rented by Isaac Reall. Both Elinor and her husband died intestate, and their property was inherited by their two children, Richard and Lydia. In 1761, the Cantwell children sold the 125 acres of woodland to Robert Meldrum for £330.18.04 (New Castle County [NCC] Deed Book W-1:94) (Table 1).

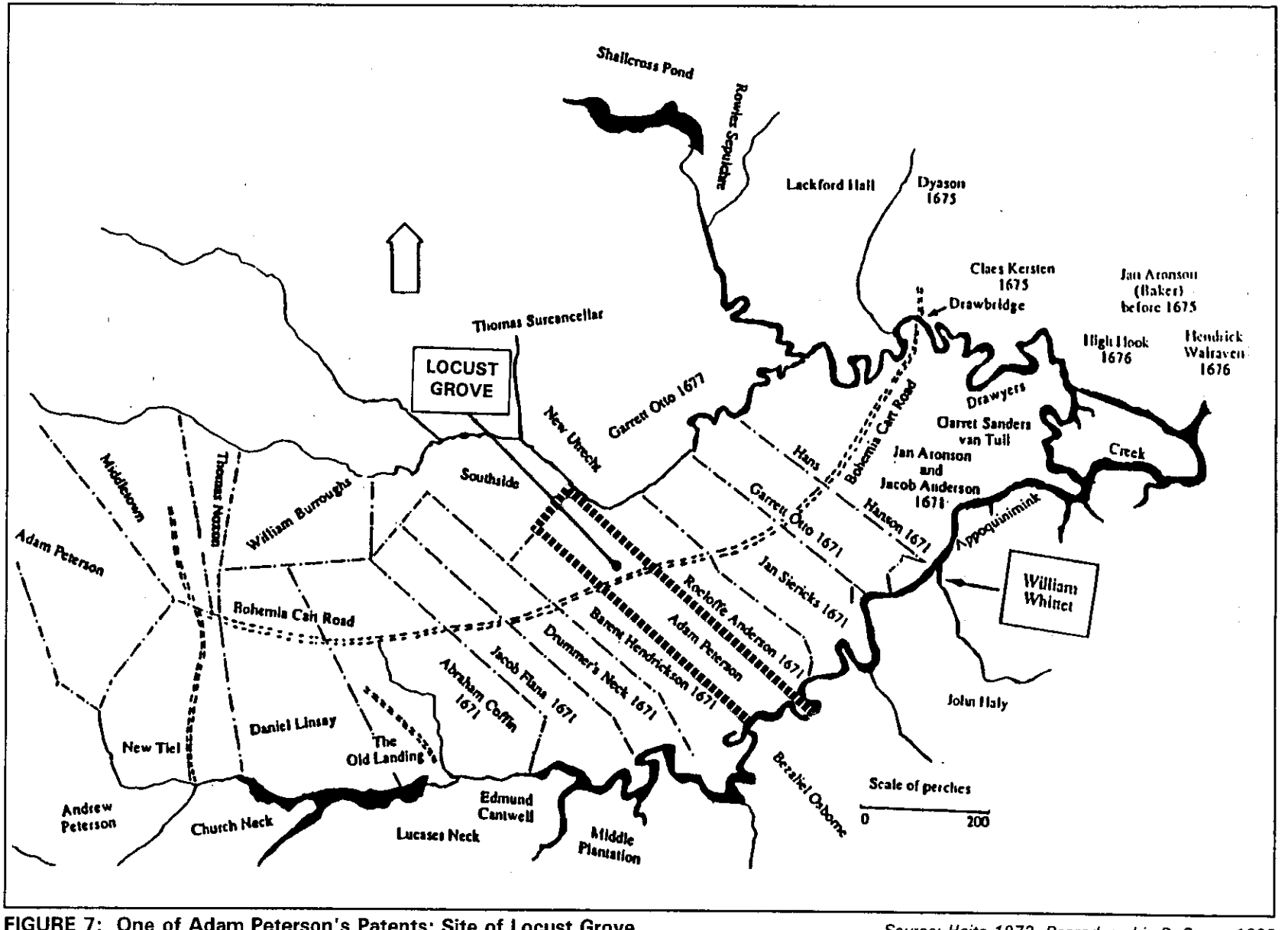


FIGURE 7: One of Adam Peterson's Patents; Site of Locust Grove

Source: Heite 1972, Reproduced in DeCunzo 1993

TABLE 1

CHAIN OF TITLE, LOCUST GROVE SITE (7NC-F-73)

DATE	TRANSACTION
1993	Wallace I. Harris, Jr., and Ruth L. Harris, to the State of Delaware October 14, 1993; recorded October 14, 1993 Tax Parcel 13-023.00-084, containing 3.60 acres $225,000 New Castle County (NCC) Deed Book 1604:097
1980	Walter C. Guseman, Jr., and Lavina M. Guseman, to Wallace I. Harris, Jr., and Ruth L. Harris March 21, 1980; recorded March 24, 1980 $60,000 3.595 acres on north side of Delaware Route 299 NCC Deed Book R-109:83
1968	Walter C. and Thelma Guseman, to Walter C. Guseman, Jr., and Lavina M. Guseman December 16, 1968; recorded December 23, 1968 $10 XXX NCC Deed Book U-81:128
1939	William Lee and Harriet Pennington, Emma P. and Francis Richards, to Walter C. Guseman of Cecil County, Maryland January 11, 1939; recorded January 14, 1939 $9,500 222-acre farm on north side of Delaware Route 299 NCC Deed Book D-41:551
1938	Marjorie M. Rawling, widow, John E. and Lucille Waidlich of Montgomery County, Pennsylvania, to William Lee Pennington, Addie P. Voshell, Madeline P. Bates, and Emma P. Richards October 15, 1938: October 26, 1938 241 acres on north side of Delaware Route 299 NCC Deed Book B-41:460 Francis M. and Emma P. Richards of Philadelphia, to Madeline P. and Roland Bates of Middletown July 11, 1938; recorded August 11, 1938 All the estate, right, title, and claim of the said Francis M. Richards, to the undivided estate of Franklin J. Pennington, deceased NCC Deed Book A-41:371
1937	Death of Geneva Pennington Will written May 2, 1930; proved January 25, 1937 Bequeathed her entire estate to her children, William Lee Pennington, Addie P. Voshell, Madeline P. Bates, and Emma P. Richards NCC Will File #20405
1929	Roland W. and Madeline P. Bates, to F.M. Richards of Philadelphia July 26, 1929; recorded July 29, 1929 *All the estate, right, title, and claim of the said Madeline P. Bates to the undivided estate of Franklin J.* Pennington NCC Deed Book K-36:501

Table 1 (continued)

DATE	TRANSACTION
1926	Death of Franklin J. Pennington Will written March 21, 1921; proved October 15, 1926 Bequeathed his entire estate to his wife, Geneva, as long as she remains a widow. Upon her death or remarriage, the entire estate goes to his children. 300-acre farm valued at $20,000, with a $10,000 mortgage. NCC Will File #13319
1900	Franklin J. Pennington, to Cora Reynolds XXX; recorded May 12, 1900 $5,039.17 The will of Samuel Pennington, Jr., specified that Franklin J. Pennington receive the 300-acre farm on the north side of the road from Middletown to Odessa. His possession of this land was subject to the payment of $5,000 plus interest to his sister, Cora Reynolds. NCC Deed Book H-18:34
1899	Will of Samuel Pennington, Jr. Will written March 28, 1899; proved August 1, 1899 300-acre farm in St. Georges Hundred bequeathed to Franklin J. Pennington. Franklin must pay his sister, Cora Reynolds, $5,000 plus interest from March 25, after Samuel's death NCC Will Book W-2:97
1825	Margaret B. Cochran, widow, to Samuel Pennington June 20, 1825; recorded July 29, 1825 $1 1/3 interest in the 121 acres and 34 perches previously owned by Joseph Meldrum. With the death of Joseph Meldrum, 1/3 of the land descended to his sister, Rebecca, who married Samuel Pennington. Upon Rebecca's death, the 1/3 interest descended to Rebecca's daughter, Margaret B. Cochran (nee Pennington). Samuel Pennington purchased the 2/3 interest in this land in 1801. NCC Deed Book B-4:569
1823	Will of Samuel Pennington, Sr. Will written December 14, 1823; proved December 31, 1823 Son, Samuel, receives 80 acres of Meldrum farm and adjoining 175 acres purchased from William Frazer. Daughter, Margaret B. Cochran, receives farm known as "Ledgefield," provided she quit claim her rights to Meldrum farm to her brother, Samuel. NCC Will Book S-2:9
1801	Benjamin and Elizabeth Flintham and Richard and Christiana Flintham, to Samuel Pennington of Cecil County, Maryland June 14, 1801; recorded August 14, 1801 £969.15 Undivided 2/3 part of 121 acres and 34 perches which was Joseph Meldrum's farm NCC Deed Book W-2:441
1795	Will of Sarah Meldrum Will written February 13, 1794; proved March 6, 1795 Bequeath all of my property to son, Joseph NCC Will Book O-1:55

Table 1 (continued)

DATE	TRANSACTION
1793	Will of Robert Meldrum Will written August 19, 1793; proved August 31, 1793 Wife, Sarah, to have use of landed estate or farm during her widowhood. Upon her death, entire farm is bequeathed to son, Joseph, at £6 per acre. Total amount of value to be equally divided among four children (Elizabeth, Kesia, Joseph, and Rebecca). NCC Will Book N-1:347
1761	Richard and Sarah Cantwell, and Lydia Cantwell, to Robert Meldrum August 15, 1761; recorded December 15, 1763 £330.18.4 Andrew Peterson died owning many tracts of land. Elinor Cantwell, wife of Richard, was one of Andrew Peterson's children. The estate of Andrew Peterson was divided on December 22, 1742, at which time 125 acres of woodland went to Richard Cantwell and his wife, Elinor. Both Richard and Elinor died intestate while still owning the parcel, leaving Richard and Lydia Cantwell as the only surviving heirs of Richard and Elinor Cantwell. NCC Deed Book W-1:94

Robert Meldrum and his sister lost their father, John Meldrum, in 1749, when they were still children. The New Castle County Orphans' Court appointed Alexander Bryan to be Robert Meldrum's guardian. The guardian's account indicated that a balance of £105.16.9 and 3 farthings remained in John Meldrum's estate. Normally, the estate's balance was invested until the heirs came of age (NCC Orphans' Court Record C:137, 157).

In 1751, Robert Meldrum, then 14 years old, was bound to Robert Watts of Red Lion Hundred as an apprentice cordwainer (shoemaker). At the end of his apprenticeship, at age 21, Meldrum was to receive £4, or the tools of his trade and two suits of clothes (NCC Orphans' Court Record C-1:141). It is uncertain how Robert Meldrum afforded the purchase of the Cantwells' 125 acres in 1761, when he was just 24 years old and had come into such a small inheritance.

Robert Meldrum took an active role in his community as soon as he established his farm. Old Drawyers Church was the first Presbyterian church established in St. Georges Hundred. It served many of the Dutch settlers who had previously been members of the Dutch Reformed Church. The initial structure was built in 1711, but by 1760, the building had fallen into disrepair. Robert Meldrum was one of the people on the committee that collected funds for the rebuilding of the church. Meldrum donated £10 of his own money to the cause (Foot 1898:31-32). Bricks for the construction of the present church were reportedly fired in a brick kiln on Robert Meldrum's farm in 1769 (Foot 1898:30).

In 1782, Robert Meldrum was head of a household of nine. Meldrum's household consisted of two males over 18 years of age, one under 18, three females over 18, and three females under 18, a total of nine individuals (Hancock 1983:89). Robert Meldrum was able to rise to a much

higher station in life than that of a cordwainer. At the time of his death in August 1793, Robert Meldrum's personal property was valued at £617.9.4. Certain items in his inventory were associated with a high socioeconomic status, including a riding carriage, a mahogany card table, a walnut desk and table, teaware, silver spoons, and eight slaves, four of whom were children. He owned seven horses, a pair of oxen, 14 cows, 57 head of sheep, and pigs. Meldrum's crops included corn, wheat, rye, flax, and clover (NCC Inventory: Robert Meldrum).

Robert Meldrum and his wife, Sarah, had four children; Joseph, Elizabeth, Christiana (also known as Kesia), and Rebecca. Meldrum's will specified that his landed estate was to be used by his wife during her widowhood. Upon Sarah's death, Joseph was to receive the whole farm at a value of £6 per acre, with the stipulation that the total value be divided among the four children. Joseph was given four years from the time of his mother's death to pay his three sisters their shares (NCC Will Book N-1:347) (see Table 1).

Sarah Meldrum died in 1795, two years after her husband. Her will specified that all of her property was to go to her son, Joseph, who was approximately 20 years of age (NCC Will Book O-1:155). Joseph Meldrum owned the 125-acre farm for seven years, until he died intestate in 1801 (Tatnall Tombstone Collection n.d.). Some records refer to Joseph Meldrum as a Doctor of Medicine. At the time of Joseph Meldrum's death, his estate was valued at $2,682.42. Some of the items inherited from his father seem to have remained in his possession, such as the walnut desk and table, mahogany card table, silver spoons, and seven African-Americans. Meldrum's wealth was concentrated in his crops and livestock. The livestock included six horses, 12 cows, 19 head of sheep, pigs, and poultry. He grew wheat, corn, rye, oats, flax, buckwheat, and beans (NCC Inventory File: Joseph Meldrum). Joseph Meldrum was buried in the Old Drawyers Church Cemetery near his father, Robert, mother, Sarah, and brother, John, who had died in 1792. In 1804, an account of Joseph Meldrum's estate prepared by Benjamin Flintham, his administrator and brother-in-law, revealed a balance of £1,430.19.9 remaining in the estate. To settle the estate, the balance was divided, and £475.1.7½ distributed to each of Joseph's sisters (NCC Inventory File: Joseph Meldrum).

In about 1801, Elizabeth Meldrum married Benjamin Flintham, Kesia Meldrum married Richard Flintham, Esquire, and Rebecca Meldrum married Samuel Pennington, a resident of Cecil County, Maryland (Marriage Catalog 1801). Because Joseph Meldrum died intestate and left no widow or children, his three sisters inherited the farm, described as 121 acres and 34 perches of land (NCC Deed Book W-2:441). In June 1801, Benjamin and Elizabeth Flintham, and Richard and Christiana Flintham, conveyed their respective shares in the Meldrum farm to their sister, Rebecca, and her husband, Samuel Pennington, for £969.15 (NCC Deed Book W-2:441) (see Table 1).

In 1804, Samuel Pennington was assessed taxes on 120 acres of land, 80 of which were improved. He owned a dwelling house, a kitchen, a barn, a stable, a crib, livestock, and four slaves, and his personal property was valued at $328.22 (NCC Tax Assessments, St. Georges Hundred 1804). This tract of land and the buildings comprise the same property where Joseph Meldrum had lived, and are considered to be a significant number of buildings for a farm of the

period. In 1805, Samuel Pennington purchased 170 acres, for £775, from William and Mary Frazer, and William Clark Frazer and his wife, Susannah. This tract of land abutted the southern side of the former Meldrum farm and had been deeded to Mary Frazer by her mother, Veronica Peterson, the widow of Adam, Jr. (NCC Deed Book D-3:113). Pennington purchased another 34 acres in 1810. Known as "Hickory Town," this tract of land was bought from another daughter of Veronica Peterson, Letitia Clark, for $864.37. It adjoined the western side of the Meldrum farm tract (NCC Deed Book I-3:432). This purchase created a farm of over 300 contiguous acres.

Rebecca Pennington died in 1802, at the age of 23 (Tatnall Tombstone Collection n.d.). Samuel Pennington married for a second time to a woman named Hannah, with whom he had three children: Margaret, Samuel, Jr., and John Augustine. Samuel Pennington's daughter, Margaret, married John T. Cochran, a neighboring landowner, in 1819 (Cochran Family Reunion Booklet 1986). John T. Cochran died in 1822; three years later, Margaret married merchant William Polk of Odessa (McCarter and Jackson 1882:429). By 1817, William Polk had moved to Cantwell's Bridge, where he had a large mercantile business specializing in the shipment of grain. William Polk retired from business in 1839, and died in 1852 (McCarter and Jackson 1882:429).

In 1816, Pennington was assessed tax on 200 acres with a wooden dwelling, a barn, and a stable, plus 60 acres of woodland, 20 acres of branch and cripple (wetlands), one house and lot in Middletown, and livestock valued at $622. The 280-acre farm was valued at $6,160 (NCC Tax Assessments, St. Georges Hundred 1816:89). In 1816, the mean number of acres per farm in St. Georges Hundred was 235, 22 percent of which was woodland (Herman et al. 1985:113). Although the size of Samuel Pennington's farm was considerably above average, his percentage of woodland was almost exactly 22 percent.

Samuel Pennington's second wife, Hannah, died on June 3, 1821, and was buried in the Old Drawyers Church Cemetery (Old Drawyers Church Tombstone Records n.d.). In the fall of 1822, Samuel Pennington took Eliza S. Armstrong as his third wife. Eliza and Samuel had one daughter, named Lavinia. Three years after their marriage, Samuel died (Old Drawyers Church Tombstone Records n.d.).

At the time of his death in 1823, Samuel Pennington was a large landholder. He bequeathed his 200-acre farm, known as "Ledgefield," to his daughter, Margaret, provided she give up her rights to her father's home farm, i.e., "Meldrum Farm." Samuel, Jr., received 80 acres of the "Meldrum Farm," plus the adjoining 175 acres his father had purchased from William Frazer (see Table 1). John Augustine received all of Samuel Pennington's real estate in Middletown, which consisted of a storehouse, dwelling, and carriagemaker's shop. Lavinia received a house and lot in Cantwell's Bridge. Samuel Pennington's will stipulated that his two sons were to have all of his bank stock, Lavinia was to receive $4,000 annually from her brothers once she reached the age of 16, and all their father's personal property was to be sold and the proceeds divided between Samuel, Jr., and John Augustine. Samuel also stated his desire to continue the business partnership with his nephew, Augustine H. Pennington, and bequeathed the profits to his sons (NCC Will Book S-1:9).

The inventory of Samuel Pennington's estate was completed by neighbors, Outten Davis and Robert Cochran, in January 1824. Pennington's property was valued at $3,576.99. A public sale was held on January 13, 1824, at which the household goods and farm equipment were sold (NCC Probate File: Samuel Pennington). The New Castle County Orphans' Court appointed Samuel Pennington's nephew and business partner, Augustine H. Pennington, to be the guardian of the minor children, Samuel, Jr., and John Augustine (NCC Orphans' Court Record L-1:264). Soon after Samuel's death, his children, John Augustine and Lavinia, died (NCC Chancery Case: Eliza Pennington vs. William Polk et al., 1829).

A description of Samuel Pennington's estate appears in an 1824 New Castle County Orphans' Court record to fulfill the requirements of the guardians overseeing the Pennington children's affairs. The "Meldrum Farm" and adjoining acreage were described as having a one-story log dwelling house and kitchen under one roof, with a small adjoining shed, a granary and barn with stables, and a smokehouse, all in a fair state of repair. A wagon house was in bad condition. The 150 acres of arable land were divided into five fields; there were 70 apple trees (many of which were on the decline), 30 peach trees, and a few cherry trees. The entire farm was listed as having an annual rental value of $400 (NCC Orphans' Court Record L-1:336). In this period, these types of outbuildings were becoming more typical on larger farms.

Three years later, in 1827, the "Meldrum Farm" was again described in a New Castle County Orphans' Court record. At that time, the farm was in the tenure of Pere Hendrickson. It was described as having a one-story log dwelling house and attached kitchen in bad repair, with an adjoining log granary and an old shed. The wagon house, carriage house, and crib were also described as being in bad condition. A frame meat (smoke) house, a frame barn, and stables were in fair condition. The orchard consisted of 70 apple trees in a state of decline, and a few cherry trees. The annual rental value of the farm was estimated to be $300, a 25 percent decline in value in three years (NCC Orphans' Court Record M-1:302).

In 1830, the commissioners of Samuel Pennington's estate reevaluated his landholdings. Much of the description is very similar to the 1827 description, except for the commissioners' suggestion that $100 be spent to repair the roof, window sash, weatherboarding, and doors. It was also recommended that the farm be tilled, with one field planted in corn, two fields sowed with wheat, and one field planted with clover seed annually (NCC Orphans' Court Record N-1:400).

William Polk petitioned the New Castle County Orphans' Court on July 21, 1829, requesting that Samuel Pennington, Jr., receive, from his father's estate, the St. Georges Hundred farm with a annual rental value of $600, and that William B. Janvier be appointed his guardian (NCC Orphans' Court Record N-1:250). The following day, the Orphans' Court approved William B. Janvier as Samuel Pennington, Jr.,'s guardian (NCC Orphans' Court Record N-1:250).

Prior to his marriage to Eliza S. Armstrong, Samuel Pennington had drafted a marriage contract stating that at his death, in lieu of her dower, Eliza was to receive $200 each year she remained his widow. Samuel Pennington's nephew and business partner, Augustine, learned of the

marriage contract just before Samuel's death, but could not find it among Samuel's papers (NCC Chancery Case: Eliza Pennington vs. William Polk et al., 1829). Disregarding the marriage contract, Eliza filed in the New Castle County Orphans' Court for the one-third dower share in her husband's estate. Presumably, Eliza believed that the dower portion of her husband's estate was a far greater sum of money than she would earn from the $200 her marriage contract would have allocated her annually. It appears that Eliza was thwarted in her attempts to receive her dower.

In 1829, Eliza Pennington brought suit against her stepdaughter and stepson-in-law, Margaret and William Polk, and her stepson, Samuel Pennington, Jr., the remaining heirs of Samuel Pennington. The chancery case dragged on for five years. Augustine Pennington, acting as the estate's executor, had apparently paid Eliza a portion of the money she was seeking, but in 1831, he requested that a contract be signed to pay her annually (NCC Chancery Case: Eliza Pennington vs. William Polk et al., 1829). Augustine was replaced as the estate's executor by Robert Polk. In February 1834, Robert Polk responded to Eliza's suit, stating that he believed that Eliza had destroyed the marriage contract to obtain her dower from the estate, and that neither Margaret, nor Samuel, Jr., had received any portion of their father's personal estate. Robert Polk claimed that Augustine Pennington still held a large portion of Samuel Pennington's personal estate, which prevented Polk from paying Eliza (NCC Chancery Case: Eliza Pennington vs. William Polk et al., 1829). In December 1834, a decree was issued by Chancellor Kensey Johns, Jr., awarding Eliza S. Pennington $2,000, her annuity since her husband's death ten years before (NCC Chancery Case: Eliza Pennington vs. William Polk et al., 1829).

Samuel Pennington, Jr., reached his majority in 1836. By that year, he was living in the house and farming the land known as the "Meldrum Farm," which continued to have a log dwelling. In 1840, Samuel Pennington, Jr., was head of a household of four, consisting of three males and one female, plus two free African-American males, three free African-American females, and five people employed in agriculture. Samuel Pennington, Jr., and Mary Ball probably married in about 1842, when she was approximately 21 years old, since her eldest child, Ella, was eight years old in 1850 (Tatnall Tombstone Collection n.d.; U.S., Bureau of the Census, Population Schedule 1850:177).

The 1849 Rea and Price map of St. Georges Hundred depicts S. Pennington as the only person occupying land on the northern side of the road leading from Middletown to Cantwell's Bridge, between the road leading to Thomas's Gristmill and Cantwell's Bridge. S. Pennington's residence was situated slightly to the northeast, across the road from R.S. Cochran's dwelling (Rea and Price 1849) (Figure 8).

In 1850, Samuel was head of a household of eight, which included himself; his wife, Mary; his daughter, Ella, who was eight years old; his son, Clarence, who was seven years old; his daughter, Cora, who was five years old; his son, Franklin, who was two years old; Hannah Euphron, a black female, 17 years old; and John Landry, a black laborer, 21 years old. His real estate was valued at $23,500 (U.S., Bureau of the Census, Population Schedule 1850:177). Pennington's farm had 100 improved acres, $150 in tools, three horses, four milch cows, two

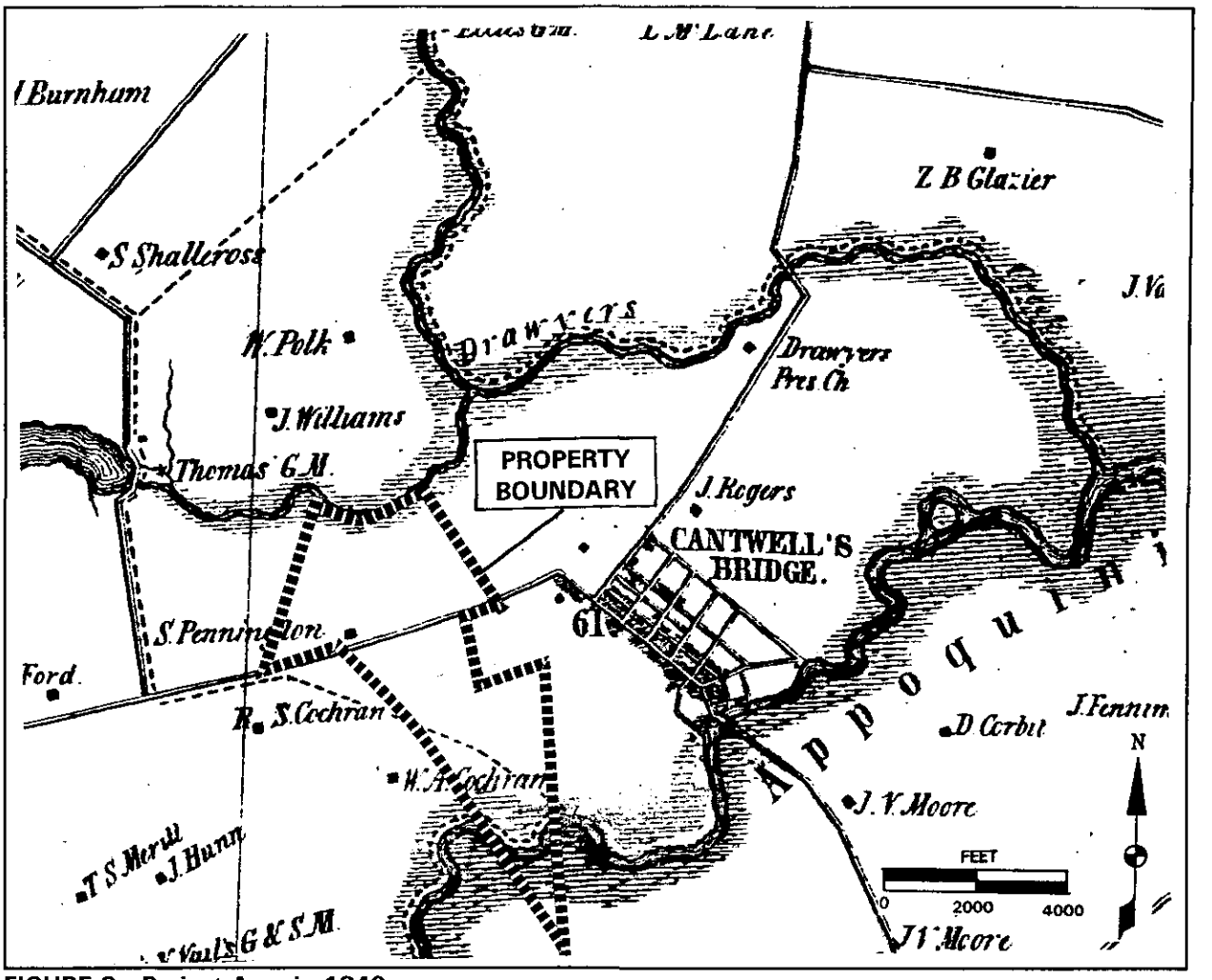


FIGURE 8: Project Area in 1849 *Source: Rea and Price 1849*

swine, and produced 275 bushels of wheat, 275 bushels of Indian corn, 70 bushels of Irish potatoes, and 208 pounds of butter (U.S., Bureau of the Census, Agricultural Schedule 1850:121) (Table 2). Except for potatoes, the production and value of Pennington's farm in 1850 were all below the average for St. Georges Hundred (Table 3).

In a listing of taxables for St. Georges Hundred for 1849-1853, Samuel Pennington is listed as owning six properties. Pennington's six properties were comprised of the 330-acre farm known as the "Meldrum Farm," which was listed as having a log house and barn; 104 acres; a frame house and lot; a second frame house and lot; a brick house and lot; and a brick house and store (NCC Tax Assessments, St. Georges Hundred 1849-1853). The fact that Pennington's 330-acre farm is listed as having only a log house and barn is curious, since the Greek Revival portion of Pennington's house, and a pyramidal-roofed smokehouse, are said to date to about 1830 (Historic American Buildings Survey 1995). The 1830 date, however, is based on stylistic grounds; since the Greek Revival style persisted until at least the 1850s (McAlester and McAlester 1985), it is possible that the structure was built later than originally assumed. In about 1853, the real estate

TABLE 2

AGRICULTURAL DATA, 1850-1880
LOCUST GROVE SITE (7NC-F-73)

OCCUPANT/YEAR	FARM SIZE	FARM/LIVESTOCK/ PRODUCTS VALUE	LIVESTOCK	FARM PRODUCTS
Samuel Pennington 1850	100 acres improved 0 acres unimproved	$8,000/$200	3 horses 4 milch cows 2 swine	275 bu. wheat 275 bu. corn 70 bu. Irish potatoes 208 lbs. butter
James P. Hoffecker Tenant 1860	300 acres improved 150 acres unimproved	$30,000/$2,000	11 horses 2 mules/asses 12 milch cows 2 oxen 20 other cattle 12 swine	800 bu. wheat 3,000 bu. corn 1,200 bu. oats 30 bu. Irish potatoes 10 bu. sweet potatoes 450 lbs. butter
Franklin J. Pennington Tenant 1870	270 acres improved 80 acres unimproved	$40,000/$2,000/$7,048	12 horses 2 mules/asses 6 milch cows 2 oxen 12 other cattle 13 swine	720 bu. wheat 3,000 bu. corn 100 bu. Irish potatoes $3,000 orchard products 300 lbs. butter 6 tons hay
Franklin J. Pennington Tenant 1880	370 acres improved 50 acres unimproved	$25,000/$1,500/$2,000	9 horses 2 mules/asses 9 milch cows 2 oxen 5 other cattle 16 swine 25 poultry	900 bu. wheat 2,000 bu. corn 1,000 bu. oats 30 bu. potatoes 50 apple trees 4,000 peach trees 200 lbs. butter

value of this farm was assessed at $8,850, while the total, including buildings, was valued at $15,050 (NCC Tax Assessments, St. Georges Hundred 1849-1853).

Two of Samuel and Mary's children died before they reached maturity. A daughter, Mary, died in 1849, at the age of three, and their son, Clarence, died in 1854, at age 11 (Old Drawyers Church Tombstone Records n.d.). By 1860, Samuel Pennington, Jr., and his family were living in Middletown. Samuel was head of a household of 11, which included himself (43 years of age); his wife, Mary (38 years of age); daughter, Ella (19 years of age); daughter, Cora (16 years of age); son, Franklin (12 years of age); son, Frederick (10 years of age); daughter, Kate (7 years of age); daughter, Laura (1 year of age); and two black males and one black female. Pennington's occupation was listed as farmer, and the value of his real estate was estimated to be $60,000 (U.S., Bureau of the Census, Population Schedule 1860:810).

TABLE 3

AGGREGATE AGRICULTURAL DATA
ST. GEORGES HUNDRED, 1850-1880

YEAR	AVERAGE FARM SIZE	AVERAGE PERCENTAGE IMPROVED ACRES	AVERAGE FARM/ LIVESTOCK VALUE	PERCENTAGE FARMS W/LIVESTOCK	AVERAGE NUMBER LIVESTOCK	PERCENTAGE FARMS W/CROPS	AVERAGE AMOUNT PRODUCTS
1850	214 acres	88%	$10,674/$585	98% horses	5 horses	89% wheat	415 bu. wheat
				12% mules/asses	3 mules/asses	98% corn	1,287 bu. corn
				98% milch cows	6 milch cows	83% oats	748 bu. oats
				35% oxen	3 oxen	1% peas/beans	
				82% other cattle	7 other cattle	88% potatoes	65 bu. potatoes
				15% sheep	22 sheep	7% buckwheat	18 bu. buckwheat
				95% swine	8 swine	11% orchards	$110 orchards
						53% hay	18 tons hay
						14% clover seed	10 bu. clover seed
						1% flax seed	3 bu. flax seed
							468 lbs. butter
1860	226 acres	86%	$15,512/$1,256	99% horses	7 horses	98% wheat	759 bu. wheat
				24% mules/asses	3 mules/asses	100% corn	1,315 bu. corn
				100% milch cows	8 milch cows	98% oats	1,049 bu. oats
				70% oxen	3 oxen	1% peas/beans	
				93% other cattle	9 other cattle	95% potatoes	85 bu. Irish potatoes
				12% sheep	31 sheep		
				99% swine	11 swine	1% buckwheat	
						2% barley	
						2% orchards	$337.50 orchards
						15% sweet potatoes	38 bu. sweet potatoes
						64% hay	18 tons hay
						13.5% clover seed	17 bu. clover seed
							447 lbs. butter

Table 3 (continued)

YEAR	AVERAGE FARM SIZE	AVERAGE PERCENTAGE IMPROVED ACRES	AVERAGE FARM/ LIVESTOCK VALUE	PERCENTAGE FARMS W/LIVESTOCK	AVERAGE NUMBER LIVESTOCK	PERCENTAGE FARMS W/CROPS	AVERAGE AMOUNT PRODUCTS
1870	207 acres	89%	$23,448/$1,775	98% horses 41% mules/asses 93% milch cows 50% oxen 74% other cattle 11% sheep 94% swine	7 horses 3 mules/asses 6 milch cows 3 oxen 6 other cattle 32 sheep 9 swine	92.5% wheat 95% corn 57% oats 1% barley 16% peas/beans 94.5% Irish potatoes 42% sweet potatoes 71% orchards 81% hay 20% clover seed 12% mkt. gard.	687 bu. wheat 1,104 bu. corn 569 bu. oats 5 bu. peas/beans 134 bu. Irish potatoes 25 bu. sweet potatoes $1,461 orchards 18 tons hay 9 bu. clover seed $395 mkt. gard. 329 lbs. butter
1880	190 acres	92%	$12,855	90% horses 36% mules/asses 95% milch cows 27% oxen 68% other cattle 15% sheep 89% swine 90% poultry	6 horses 3 mules/asses 7 milch cows 2 oxen 5 other cattle 44 sheep 9 swine 40 poultry	82% wheat 87% corn 73% oats 79% hay 28% clover seed 58% Irish potatoes 11% sweet potatoes 70% orchards	679 bu. wheat 1,293 bu. corn 159 bu. oats 26 tons hay 12 bu. clover seed 72 bu. Irish potatoes 32 bu. sweet potatoes 56 apple trees 3,132 peach trees 455 lbs. butter 4,269 gal. milk 176 doz. eggs

An examination of grantor and grantee indexes indicates that both Samuel Pennington, Sr., and Samuel Pennington, Jr., had purchased and conveyed a great deal of real estate. As early as 1808, Samuel Pennington, Sr., purchased "Ledgefield" (NCC Deed Book F-3:425). As late as 1872, Samuel Pennington, Jr., purchased 249 acres, known as "Prairie Farm," near Choptank Road (NCC Deed Book O-9:241). Despite these large farm purchases, the majority of the parcels the Penningtons purchased and conveyed were lots in the village of Middletown.

Since Pennington was living in Middletown by 1860, it is believed that a tenant was farming the land situated on the northern side of the road from Middletown to Odessa which included the land known as the "Meldrum Farm." In order to determine who was farming Pennington's land, R.A. Cochran and W.A. Cochran, his neighbors for many years, were located in the 1860 agricultural schedule, and then the names of the surrounding farmers who were not real estate owners were examined. From this process it was deduced that James P. Hoffecker may have been farming Pennington's 300-acre farm, 150 acres of which were improved. Hoffecker's farm, which was valued at $30,000, nearly double the average for St. Georges Hundred (see Table 3), had 11 horses, two mules, 12 milch cows, two working oxen, 20 other cattle, and 12 swine, and produced 800 bushels of wheat, 1,200 bushels of oats, 30 bushels of Irish potatoes, 3,000 bushels of Indian corn, 10 bushels of sweet potatoes, and 450 pounds of butter (U.S., Bureau of the Census, Agricultural Schedule 1860:22) (see Table 2). In most categories of livestock and farm products, Hoffecker's farm was well above average.

During the Civil War, both Samuel Pennington, Jr., and his son, Franklin, served their country in Middletown's Company I, under Lieutenant Morgan. Samuel was a captain, and Franklin a "fifer," each for a nine-month term (Civil War Service Records). After his Civil War service, Samuel Pennington continued to reside in Middletown, while his son, Franklin, farmed the 300 acres of land on the road from Middletown to Odessa. Although Franklin may have been farming the 300 acres of land, the 1868 Beers *Atlas of the State of Delaware* continues to depict Captain S. Pennington on the property, since he remained the owner. It is in this atlas that Samuel Pennington's farm is first referred to as "Locust Grove," the derivation of which is unknown (Beers 1868:plate 31) (Figure 9).

Sometime between 1870 and 1880, a large Second Empire-style section was added to the existing Greek Revival-style farmhouse known as Locust Grove. The size, the ornamental detail, and the section's prominent placement facing the road exhibit Pennington's continued financial success and his desire to illustrate his achievements. Interior arrangements, such as the center-hall plan and separated service areas, exemplify the changing attitudes toward domestic space relationships which were occurring on a widespread basis throughout St. Georges Hundred during this period (Kise, Franks & Straw 1994).

In 1870, Samuel Pennington, Jr., was head of a household of 11, which included himself (53 years of age); his wife, Mary (49 years of age); son, Frederick (20 years of age); daughter, Kate (18 years of age); daughter, Laura (11 years of age); son, Wilmer (9 years of age); one white domestic servant named Sally Henry; one black domestic servant named Elizabeth Brisco; one black waiter named Walter Lamer; and two black farm laborers (U.S., Bureau of the Census, Population Schedule 1870:715).

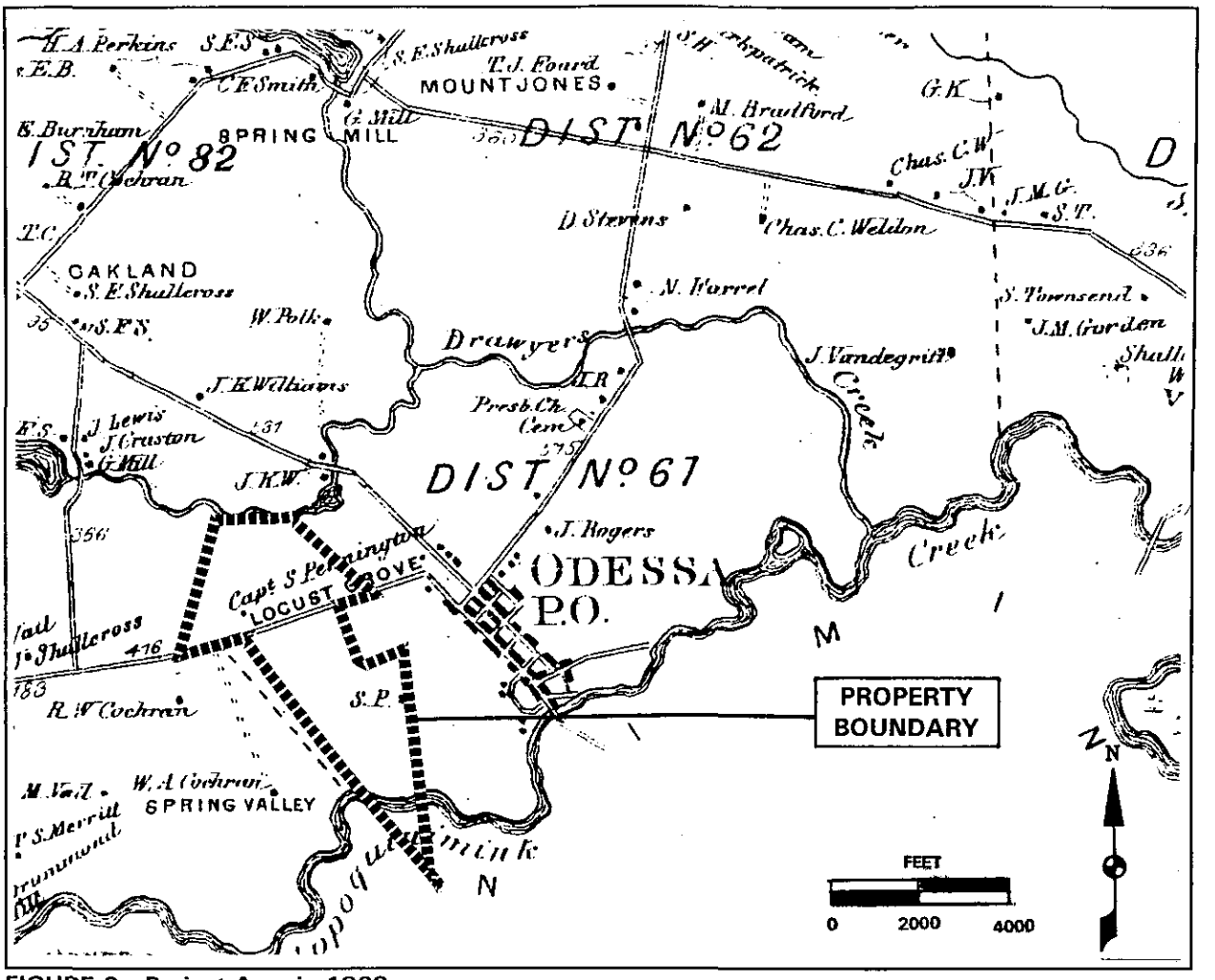


FIGURE 9: Project Area in 1868 *Source: Beers 1868*

Although Franklin Pennington was enumerated in the household of Charles Polk in the 1870 population schedule, he was listed in the agricultural schedule as farming 270 improved acres and 80 unimproved acres in St. Georges Hundred. Since W.A. Cochran was listed as the owner of the neighboring farm, it is suspected that Franklin was farming his father's 300-acre farm. In that year, Franklin Pennington's real estate was valued at $40,000, while his personal estate was listed at $1,000. His farm consisted of 12 horses, two mules, six milch cows, 12 other cattle, two working oxen, and 13 swine, and produced 720 bushels of wheat, 3,000 bushels of Indian corn, 100 bushels of Irish potatoes, six tons of hay, 300 pounds of butter, and $3,000 in orchard products (U.S., Bureau of the Census, Agricultural Schedule 1870:9) (see Table 2). Like Hoffecker's farm in 1860, Franklin Pennington's agricultural operation in 1870 was obviously successful and was well above the average for St. Georges Hundred, in terms of farm value as well as in the number of animals and amount of farm products (see Tables 2 and 3). Like other farmers in Delaware during this period, Pennington had evidently converted some of the land he was farming to orchards, probably hoping to take advantage of the boom in peach production.

Eliza S. Pennington, the third wife of Samuel Pennington, Sr., died in September 1873, at the age of 76, and was buried at the Old Drawyers Church Cemetery (Old Drawyers Church Tombstone Records n.d.). Samuel Pennington, Jr.,'s wife, Mary Pennington, died in 1874, at the approximate age of 51 (Tatnall Tombstone Collection n.d.). It appears that two years after the death of Mary, Samuel Pennington, Jr., who was 59 years of age, married a woman named Elizabeth J. Burnham.

In 1880, at the age of 31, Franklin J. Pennington married Geneva Wilson, and took up residence on Samuel Pennington's recently improved farm known as "Locust Grove." Being newly married, Franklin and Geneva did not have any children, but in that year they are enumerated with eight servants in their household (U.S., Bureau of the Census, Population Schedule 1880:E.D. 29, Supervisor District 16). Franklin's farm and buildings were valued at $25,000. The farm was comprised of 370 improved acres and 50 acres of woodland. He owned nine milch cows, nine horses, two mules, two oxen, five other cattle, 16 swine, and 25 poultry, and produced 2,000 bushels of Indian corn, 30 bushels of Irish potatoes, 900 bushels of wheat, 1,000 bushels of oats, 100 bushels of apples, 15 bushels of peaches, and 200 pounds of butter (U.S., Bureau of the Census, Agricultural Schedule 1880:E.D. 29, Supervisor District 16).

In 1880, Samuel Pennington, Jr. (62 years of age), continued to live in Middletown with his wife, Elizabeth J. (40 years of age); daughter, Cora (20 years of age); son, Wilmer (19 years of age); a black female cook; and two black male farmhands (U.S., Bureau of the Census, Population Schedule 1880:E.D. 36, Supervisor District 16). The following year, Captain S. Pennington appears in the Hopkins *Atlas of New Castle County, Delaware* as owning 275 acres, and Franklin is listed as the owner of the residence (Hopkins 1881). In 1893, despite the fact that Franklin had been living at this location for some time, only Captain S. Pennington is listed in Baist's atlas as the owner (Baist 1893:15) (Figure 10).

Samuel Pennington, Jr., died in 1899. In his will he bequeathed $5,000, in lieu of a dower, to his wife, Elizabeth J., as set out in the provisions of a marriage contract entered into between them on October 7, 1876. From his father's estate, Franklin J. Pennington received the 300-acre farm situated on both sides of the road from Middletown to Odessa, which he and his wife, Geneva, already occupied. It was stipulated that Franklin must pay his sister, Cora Reynolds, $5,000 with interest (see Table 1). Samuel Pennington, Jr., bequeathed his 249-acre farm on Choptank Road to his son, Wilmer, provided he paid $4,000 to Cora Reynolds. Samuel's daughter, Kate Crouch, wife of John S. Crouch, received all of her father's real estate in Middletown situated east of the Delaware Railroad, with the provision that Kate must pay her sister, Ella Cochran, $2,000. Ella Cochran received all of her father's farm and property in Middletown situated west of the Delaware Railroad. Laura West, wife of Frank C. West, received Samuel's farm in Kent County, Maryland, known as "Vienna." Samuel Pennington's will specified that his executors, John S. Crouch and Franklin, should sell his personal estate and divide the money between the six children (NCC Will Book W-2:97).

An inventory of the personal estate of Samuel Pennington, Jr., was prepared by Samuel M. Reynolds and Alexander M. Brown in August 1899. At that time, his personal property consisted

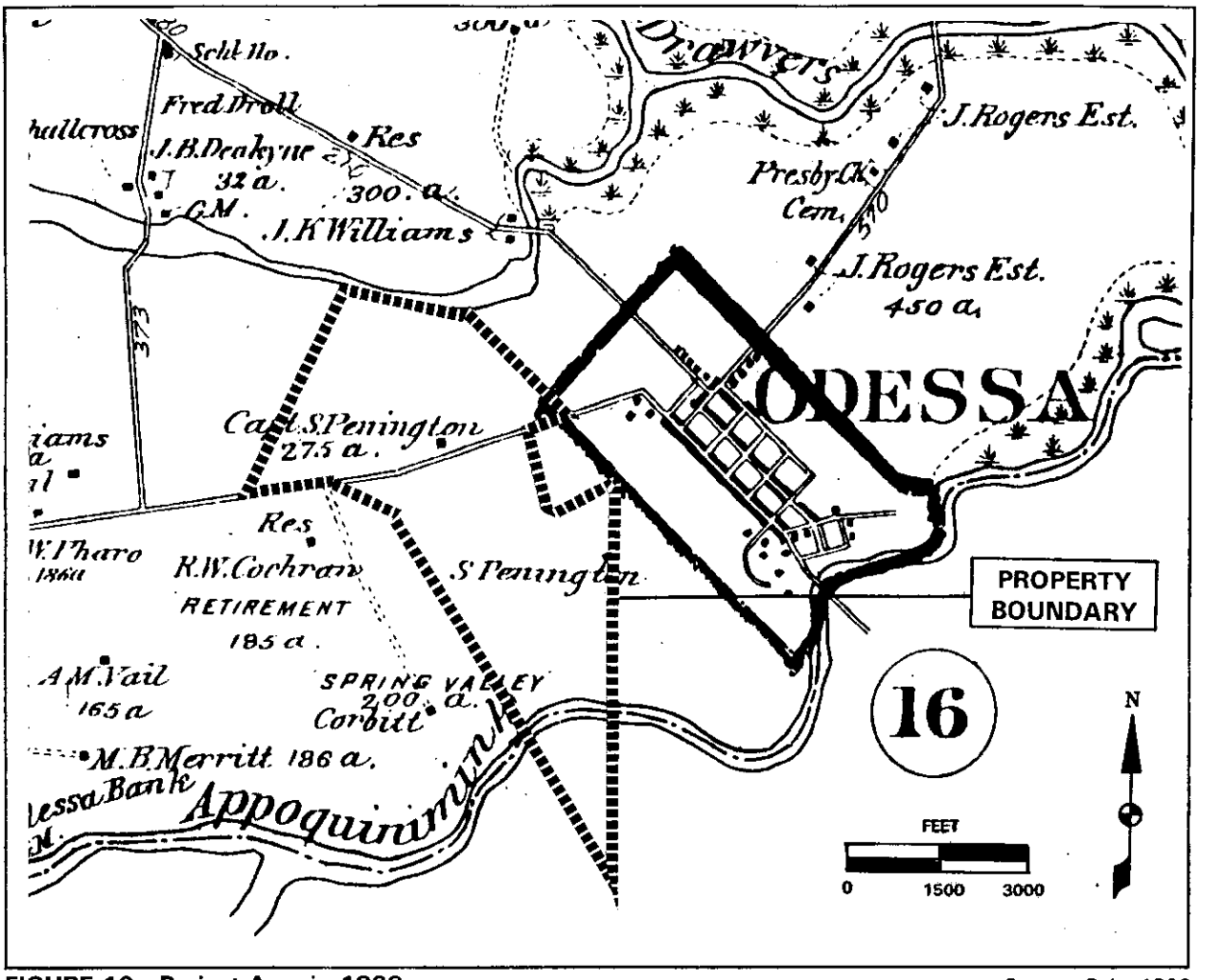


FIGURE 10: Project Area in 1893 *Source: Baist 1893*

of many objects which reflected the status he had achieved within his lifetime: a piano, an organ, two carriages, one dearborn, and a walnut bedroom suite, as well as stock in the National Bank of Odessa and the National Bank of Middletown, Delaware Railroad stock, and huge sums of wheat and corn from various farms such as his home farm, the farm known as F.J. Pennington's, the farm known as Wilmer C. Pennington's, and his farm in Kent County, Maryland. The total value of the personal property was listed at $25,619.43. Pennington's creditors were paid out of this sum. Elizabeth J. Pennington received a large payment of $7,000 from the estate which was classified as a judgment, plus $500, called a legacy. Once all of his creditors were paid, $9,070.53 was left to be divided among Pennington's six children (NCC Probate Record: Samuel Pennington, Jr.). It is apparent that even though Samuel Pennington, Sr., had been a well-respected man with a fair amount of wealth, his son, Samuel Pennington, Jr., far exceeded him in real estate holdings and prosperity.

On May 12, 1900, Franklin J. Pennington paid his sister, Cora Reynolds, $5,039.17, which was the payment of $5,000 plus interest specified in his father's will (NCC Deed Book H-18:34) (see

Table 1). The children of Franklin and Geneva Pennington were Addie P. Voshell, Madeline P. Bates, Emma P. Richards, and William Lee Pennington. In 1926, Franklin J. Pennington died at the age of 82. In his will, he bequeathed his entire estate to his wife, Geneva, for her widowhood.

Geneva Pennington died October 28, 1936, leaving her entire estate to her children. Her will, which was proved in January 1937, appointed Francis M. Richards, her son-in-law, as her executor. The total sum of the inventory of Geneva's estate was $994.16, which consisted of a farm account; 633 bushels of corn, which were sold to the Crothers Brothers of Mount Pleasant, Delaware, for $550.71; and an unspecified amount of furniture and jewelry. The fair market value of Geneva's house was assessed at $5,000, but it was noted that she had a mortgage of $3,800. At the time of her death, Geneva owned a three-story frame dwelling at 124 South Broad Street in Middletown, which was valued at $2,400. It is not known whether Geneva's house in Middletown, or the farmhouse owned by her husband, Franklin, is the property referred to as Geneva's house. It is also not known which property was the one mortgaged (NCC Will Record No. 20405).

During Franklin Pennington's occupation and ownership of Locust Grove, the house and lands fell into disrepair. On January 11, 1939, William Lee and Harriet Pennington, and Emma P. and Francis Richards, the heirs of Franklin Pennington, conveyed a 222-acre farm situated on the northern side of the road from Middletown to Odessa (in this transaction referred to as Route 299) to Walter C. Guseman of Cecil County, Maryland, for $9,500 (NCC Deed Book D-41:551). Walter C. and Thelma Guseman conveyed the same land to their son, Walter C., and his wife, Lavina Guseman, for $10 in 1968, with the exception of 0.5 acres (NCC Deed Book U-81:128). In 1974, the Gusemans subdivided the farm. A result of this subdivision was that the dwelling known as Locust Grove and all the associated farm buildings which remained were now located on a 3.595-acre parcel known as Lot 1 (NCC Subdivision Map #5482). Six years later, Walter and Lavina Guseman conveyed the 3.595-acre parcel (also known as Tax Parcel 13-023.00-084) to Wallace I. Harris, Jr., and his wife, Ruth, for $60,000 (NCC Deed Book R-109:83) (see Table 1).

It is reported that Wallace Harris re-landscaped the property and installed an in-ground swimming pool (Kise, Franks & Straw 1994). In 1993, Wallace Harris and his wife, Ruth, sold the 3.595-acre property to the State of Delaware for $225,000 (NCC Deed Book 1604:097). In 1994, Locust Grove was determined eligible for listing in the National Register of Historic Places under Criteria A and C. It has also been suggested that Locust Grove be included in the *Rebuilding St. Georges Hundred (1830-1899)* thematic nomination (Herman et al. 1985).

VI. RESULTS OF PHASE III FIELD INVESTIGATIONS

A. PROPERTY DESCRIPTION

The primary focus of the Locust Grove Site, both historically and visually, is, of course, the house. As noted previously, the structure consists of two major and stylistically distinct sections that form an L-shaped plan. The earlier of the two is a rectangular, two-story, five-bay, Greek Revival frame structure set on a brick foundation (Plate 6). It faces east, perpendicular to Middletown Road (present-day SR 299). The earlier section appears to have been built originally to a symmetrical center-passage plan that was subsequently altered by the addition of a second doorway near its northern end. This alteration may be contemporary with the construction of a one-and-one-half-story shed-roofed addition to the northern end of the Greek Revival Block during the late nineteenth century. At some point, an open porch was added to the eastern side of the original house.

PLATE 6: Locust Grove; Greek Revival Section on the Right, Second Empire Section on the Left

PLATE 7: Locust Grove, Second Empire Section

The building's second major section, placed at right angles to the earlier portion of the house, was built in the 1870s, and is a two-and-one-half-story Second Empire-style frame structure, oriented to the south, facing Middletown Road (Plate 7). The 1870s section, which more than doubled the size of the house, is five bays wide and two bays deep, and was built on a brick foundation according to a center-passage plan. A single-story screened porch extends the entire length of the southern facade; a one-story, three-sided bay window extends from each side elevation. A single-story shed-roofed addition was built onto the northwestern corner of the Second Empire section of the house during the mid-twentieth century. A later, two-story, shed-roofed addition extends along the back of the house between the one-story addition and the northwestern junction of the two main blocks.

At the time of the Phase III excavations, all sections of the house were covered by aluminum siding. This material had been removed by the fall of 1996. Also missing by this time were the exterior doors, a number of floorboards, and the handrail for the stairway in the center of the Second Empire block. Most of the windows in the house had been broken, and several had been removed entirely.

The yards surrounding the Locust Grove house consist of lawn to the south (front) and west, a filled-in swimming pool to the north, and a gravel drive and lawn to the east. A number of trees

and ornamental plantings and shrubs are located in the yards around the house. Perhaps most prominent are the mature spruces that screen the house from Middletown Road, and the two parallel lines of horse chestnut and apple trees that extend across the western yard, effectively separating the domestic core of the farmstead from the agricultural fields further to the west.

Outbuildings on the property include a single-story frame smokehouse located about 5 meters northeast of the house. Dating to the first half of the nineteenth century, and thus roughly contemporaneous with the Greek Revival section of the house, the smokehouse is square in plan and is set on a brick foundation; the pyramidal roof is metal. Several recent structures are also present. Adjacent to the house on the northwest, within the crook of the "L", is the swimming pool, set into a concrete patio. A small, one-story modern poolhouse is located just to the northwest of the pool. A small plywood shed, probably a former chicken coop, stands approximately 30 meters (100 feet) northwest of the house. Northeast of the house is a large machine shed with corrugated-metal siding; a mid-twentieth-century pole barn with corrugated-metal siding is located north of the machine shed.

B. RESULTS OF FIELDWORK

1. Introduction

As noted in Chapter III, the data recovery field strategy at the Locust Grove Site entailed the excavation of two large blocks, consisting of 39 test units and Trench 1. The West Block, located in the western side yard of the Locust Grove house, included 13 test units, while the East Block, located in the front yard, included 26 test units and one trench (Trench 1). Nine additional test units were excavated outside of the blocks to completely investigate front yard deposits (Figure 11). Nine archaeological features were identified during the Phase III work, in addition to the three identified during the Phase I and Phase II investigations (Table 4).

2. The West Block

The West Block consisted of 13 1x1-meter test units (3, 4, and 31 through 41), located in the side yard southwest of the house. The majority of the Phase III test units were placed around Test Unit 4 (Plate 8), where an intact late nineteenth-century midden was encountered during the Phase II study (Bedell 1995). Three test units were extended south from the main portion of the block, linking it with Test Unit 3 (see Figure 11).

Excavation uncovered four stratigraphic contexts within the West Block. These consisted of the topsoil/fill deposit (Stratum A), a second fill deposit (Stratum B), a refuse deposit or midden (Feature 5), and the subsoil (Stratum C) (Figure 12). Stratum A extended across the entire block, and consisted of brown or yellowish brown loamy silt and silty clay loam that averaged 25 cm (9.8 inches) in thickness. A total of 2,139 artifacts were recovered from Stratum A. These include kitchen items (N=649), most of which are ceramics, together with a smaller number of glass bottle, tumbler, jar, and tableware fragments. The ceramic assemblage is made up largely of whitewares (plain, handpainted, decal-decorated, banded, transfer-printed, and Victorian

PLATE 8: West Block During Initial Stages of Excavation

majolica), along with smaller quantities of pearlware (plain, shell edge, and handpainted), redware (undecorated, slip-trailed, and engine-turned), yellowware (plain and colored glaze), and plain creamware. The 531 architectural items collected from this deposit consist mainly of unidentified nails and broad window glass; machine-cut nails, wrought nails, and fragments of modern window glass were also recovered. Also present in relatively large numbers are fragments of unglazed redware (N=354), brick (N=360), and unidentified glass (N=176). Other items in the assemblage include lamp globe/chimney glass, barbed wire, plastic, battery parts, a tobacco pipe fragment, two cartridge casings, roofing slate, and miscellaneous hardware. A 1965 U.S. dime provides the TPQ for Stratum A, although most of the assemblage appears to date to the nineteenth or early twentieth centuries. Floral remains collected from Stratum A include three fragments of unidentifiable wood. The overwhelming majority of the faunal remains from this deposit consist of oyster shell; a total of 9.5 kilograms of oyster shell were collected from this stratigraphic unit. A few elements of pig, cow, and unspeciated mammal were also recovered.

Stratum B directly underlay Stratum A, except in Test Units 3 and 31 at the southern end of the block, where the removal of the uppermost soil layer had exposed the sterile subsoil. Stratum B ranged from 7 to 19 centimeters in thickness. It consisted variously of clayey silt, silty clay, and loamy silt that ranged in color from olive brown to pale brown, in some cases with considerable mottling, as shown in Figure 12. The artifacts recovered from Stratum B are smaller

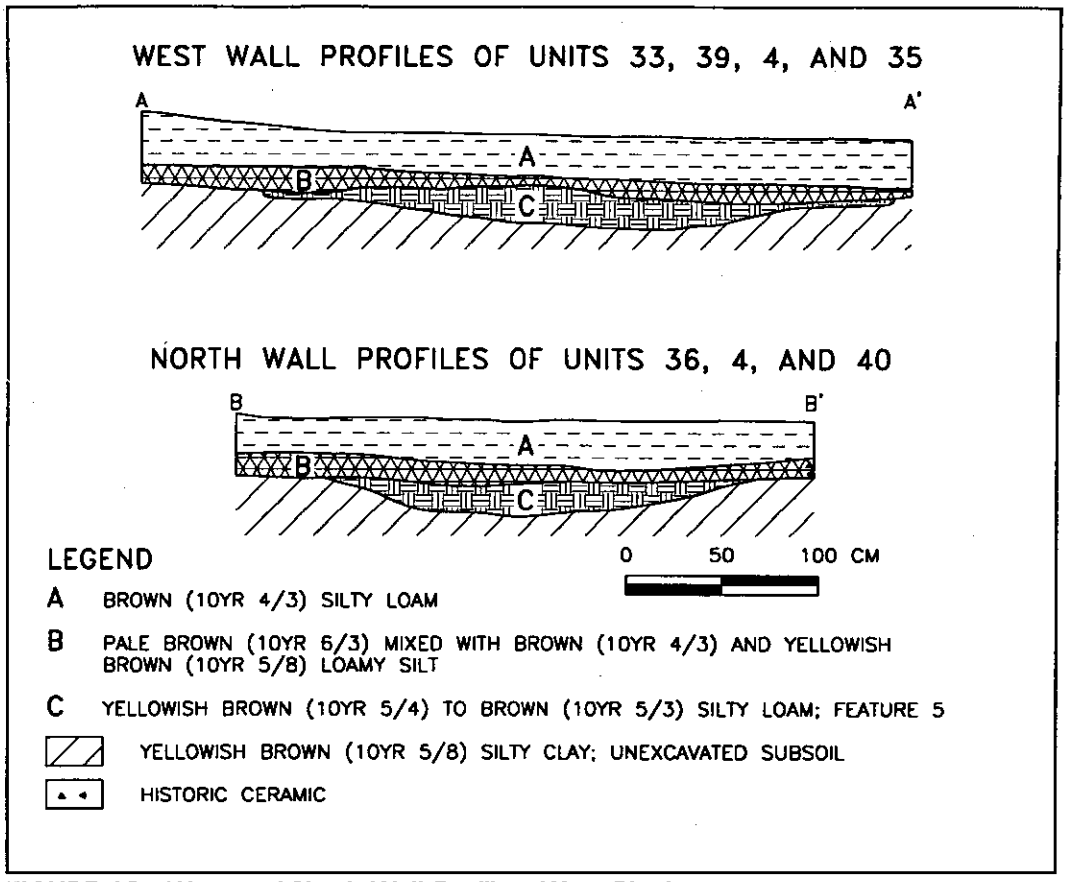


FIGURE 12: West and North Wall Profiles, West Block

in number (a total of 973 artifacts and 20 faunal specimens) compared to those from Stratum A, and are more limited in variety. For example, no arms, clothing, or furnishing-related artifacts were collected from this deposit, nor were any tobacco pipe fragments recovered. Over half of the assemblage consists of brick fragments (N=269) and unglazed redware sherds (N=279); most of the remainder are kitchen items (N=160) and architecture-related artifacts (N=175). The kitchen artifacts are mainly ceramics, which include whiteware (plain, sponged, transfer-printed, and Victorian majolica), pearlware (transfer-printed, shell edge, banded, and handpainted), creamware (plain and feather-edge), ironstone (plain), and redware (undecorated and slip-trailed). Other kitchen items include fragments of bottle and container glass. The presence of solarized glass provides a TPQ of 1880 for the deposit. Like the assemblage from Stratum A, the material from Stratum B included a considerable quantity of faunal remains, nearly all of which were oyster shell, weighing 9.16 kilograms.

The removal of Stratum B exposed the upper surface of Feature 5 in Test Units 4, and 33 through 41. As shown in Figure 13, Feature 5 was a somewhat irregularly-shaped deposit that measured 2.5 meters (8.2 feet) east to west and 3.2 meters (10.5 feet) north to south (Plate 9). The feature was lenticular in cross section, with a maximum thickness of 20 cm (7.8 inches), and was underlain by subsoil. The soil matrix of Feature 5 consisted of silty clay and silty loam and ranged in color from olive brown to yellowish brown, with some mottling (see Figure 12).

TABLE 4

LIST OF FEATURES
LOCUST GROVE SITE (7NC-F-73)

FEATURE	PHASE	LOCATION	TYPE	TEMPORAL AFFILIATION	FUNCTION
1	1	Front Yard	Architectural	19th Century	Brick Walkway
2	2 and 3	Front Yard/Test Unit 5	Pit	19th Century	Refuse Deposit
3	2	Rear Yard	Architectural	20th Century	Barn Foundation
4	3	Front Yard/East Block	Filled Depression	19th Century	Refuse Deposit
5	2 and 3	Side Yard/West Block	Filled Depression	19th/20th Century	Refuse Deposit
6	3	Front Yard/East Block	Square Mold	Historic	Posthole: fence or outbuilding
7	3	Front Yard/East Block	Pit	19th Century	Refuse Deposit
8	3	Front Yard/East Block	Square Mold	Historic	Posthole: Fence or Outbuilding
9	3	Front Yard/East Block	Filled Depression	Unknown Prehistoric/Non-Cultural	Pit House/ Treefall
10	3	Front Yard/East Block	Pit	19th Century	Refuse Deposit
11 (Stratum C, Level 3)	3	Front Yard/East Block	Brick and Stone Rubble	19th Century	Remains of Chimney or Fire Bed
12	3	Front Yard/Test Unit 63	Pit	19th Century	Refuse Deposit

Feature 5 produced a total of 764 historic artifacts and eight faunal specimens (not including oyster shell). The artifact assemblage recovered from the feature is dominated by kitchen-related items (N=270), brick fragments (N=165), and non-brick architectural-related artifacts (N=114). Also present in substantial quantities are unidentified glass (N=93), unglazed redware (N=62), and unidentified metal (N=44). Fragments of lamp globe/chimney glass (TPQ=1883), a pressed-glass button, a plastic comb, roofing slate, and miscellaneous hardware round out the assemblage. The 201 ceramic fragments (excluding the unglazed redwares) recovered make up the bulk of the kitchen-related artifacts from Feature 5. While whitewares dominate the ceramic assemblage,

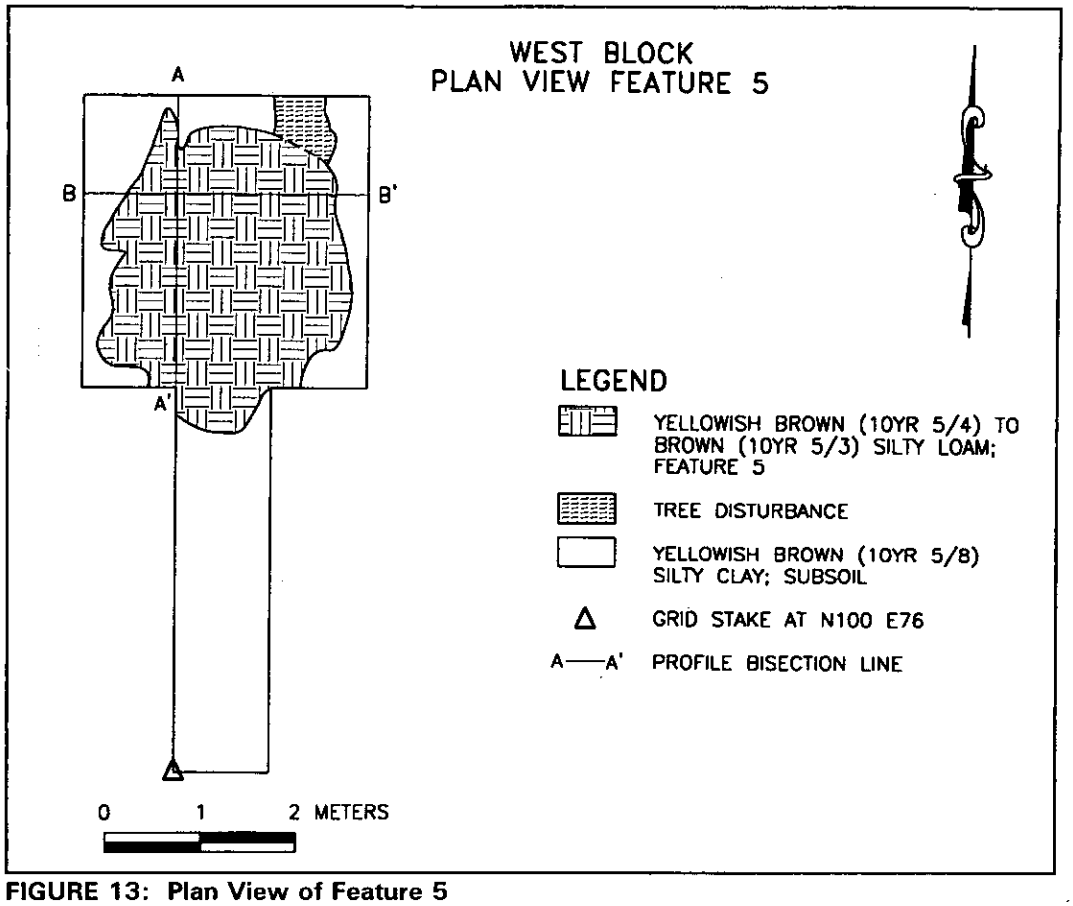


FIGURE 13: Plan View of Feature 5

their variety is rather limited (plain, embossed, and black transfer-printed), and other, earlier, ceramic types are also present in significant quantities. These include pearlware (plain, embossed, handpainted, and transfer-printed), creamware (plain and overglaze handpainted), slip-trailed redware, engine-turned red-bodied earthenware, oriental porcelain, and a fragment of buff-bodied slipware. Several fragments of plain ironstone were also recovered, and represent the ceramic type with the latest (1840) beginning date of manufacture present in Feature 5. The remainder of the kitchen items consist of bottle glass sherds, and fragments of glass drinking vessels (including tumbler and stemware sherds), jars, and tableware. In contrast to the ceramics from the feature, the diagnostic kitchen glass dates to the late nineteenth and early twentieth centuries. As noted above, the TPQ for the feature is 1883.

The non-brick architectural artifacts from the feature consist almost entirely of unidentified nails (N=100). Two hand-wrought nails, two cut nails, and 10 fragments of broad window glass were also collected.

The faunal remains (not including oyster shell) from Feature 5 are few in number and consist of two pig molar fragments, five unspeciated medium mammal bone fragments, and one bone fragment assignable only to the large mammal category. All of the medium and large mammal bone fragments showed signs of having been sawed. While oyster shell constitutes the bulk of

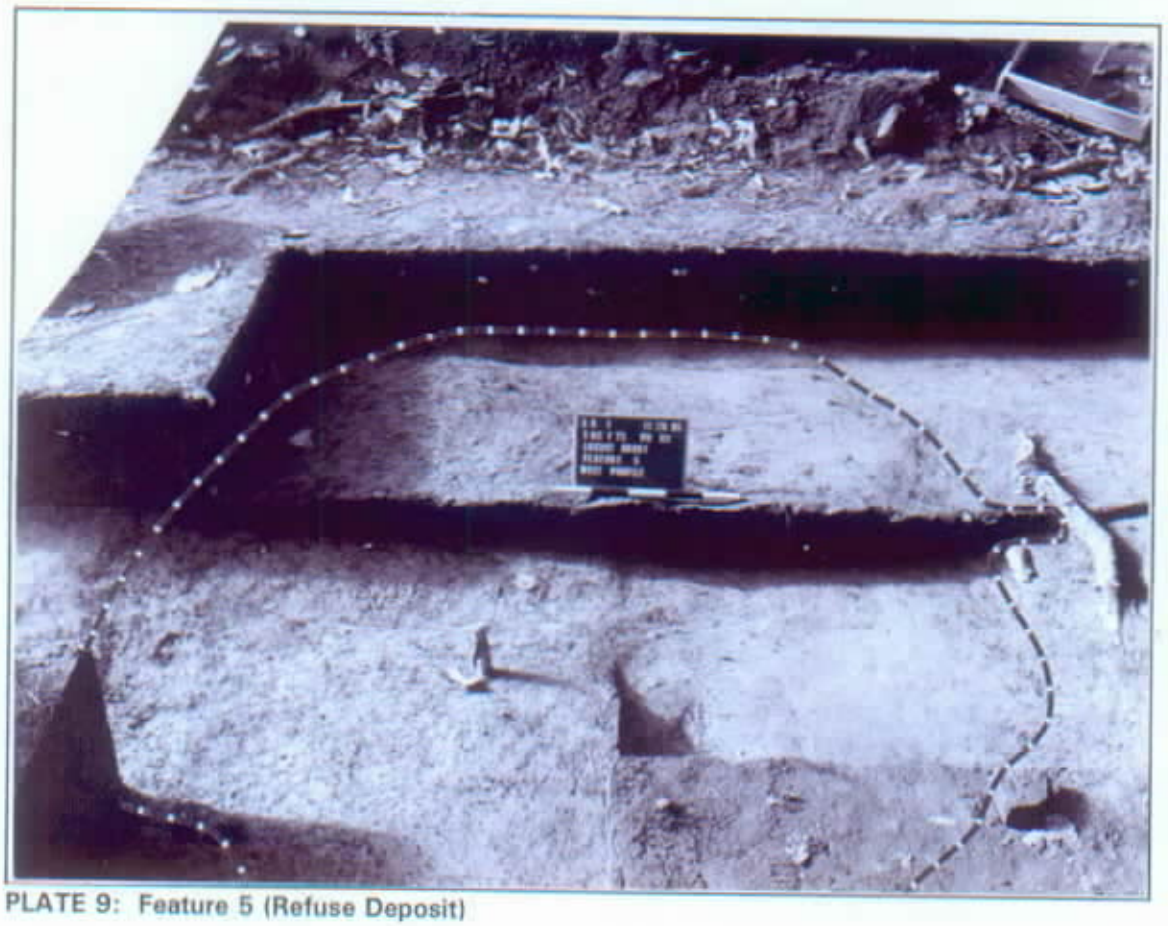


PLATE 9: Feature 5 (Refuse Deposit)

the faunal remains collected from this deposit, the 0.24 kilograms of this material that was recovered is extremely low compared to the shell weights for the overlying strata.

Stratum C, underlying Feature 5 and, in places, Strata A and B, represents the interface between the subsoil and the artifact-bearing deposits above. This stratum consisted of silty clay and clay loam that ranged in color from light yellowish brown to brownish yellow. Only five artifacts were recovered from Stratum C, including a fragment of plain pearlware (TPQ=1775), a sherd of redware, two fragments of glass, and a piece of brick. An unidentified shell was also collected.

3. The East Block

The East Block was laid out directly in front of the house, surrounding Test Unit 5 (see Figure 11; Plate 10). During the Phase II investigation, a trash pit (Feature 2) and an artifact-rich midden layer, both sealed by a layer of fill, were identified in Test Unit 5 (Bedell et al. 1997). The fill was thought to date from some substantial building or landscaping episode, possibly the building of the front section of the house in the 1870s.

The East Block consisted of 26 contiguous test units (20 through 30, and 49 through 62) and one trench (Trench 1) adjoining the eastern side of the block. Although outside the block, Test Units

PLATE 10: East Block During Excavation

8, 46, 63, and 64 are all close enough (less than two meters [6.5 feet]) that stratigraphic deposits exposed in these test units can be reliably correlated to those uncovered in the block excavation; therefore, these four test units are included in the following discussion of the East Block.

Excavation of the East Block encountered seven strata and seven features (Features 4, and 6 through 11). An eighth feature (Feature 12) was identified during the excavation of Test Unit 63 just to the south of the block.

Stratum A, representing a combination of landscaping fill and modern topsoil, extended across the entire block as well as across the four test units immediately adjacent. This deposit consisted of dark grayish brown to brown silty loam or clay loam that ranged from 17 to 23 cm (6.7 to 9.1 inches) in thickness. Stratum A contained 1,815 artifacts, consisting mainly of kitchen (N=739) and architectural (N=419) items, brick fragments (N=403), and sherds of unglazed redware (N=100). The kitchen artifacts are made up largely of ceramics, together with smaller numbers of bottle, jar, tableware, and drinking vessel sherds. The ceramics collected from Stratum A consist, for the most part, of whiteware fragments, the majority of which are undecorated. Decorated whitewares include embossed, handpainted, dipped, shell edge, transfer-printed, sponged, banded, and decal-decorated varieties. Pearlware (plain, dipped, blue handpainted, polychrome handpainted, and transfer-printed), redware (glazed and slip-trailed), yellowware

(plain and embossed), creamware (plain and embossed), and stoneware (including a single fragment of scratch-blue white salt-glazed stoneware [1744-1775]) were also recovered. The architectural items from Stratum A include 202 fragments of window glass (mainly broad glass, with a few examples of crown and modern window glass), 177 nails (wrought, cut, wire, and unidentifiable), and three examples of plumbing/electrical hardware. Among the other artifacts recovered were buttons, tobacco pipe fragments, pharmaceutical bottle/vial fragments, unidentified metal, miscellaneous hardware, unidentified glass, plastic, and roofing slate. The 36 faunal specimens recovered from Stratum A include oyster shell, pig, cow, medium mammal, and unidentified mammal.

Three of the 10 prehistoric artifacts recovered during the Phase III investigations were collected from Stratum A in the East Block. These include two pieces of cracked rock and a chert uniface fragment.

The removal of Stratum A uncovered four different stratigraphic deposits (Figure 14). The western half of the block contained a combination of dark grayish brown to dark yellowish brown silty loam, clay, and clay loam. Designated Stratum B1 (to differentiate it from a similar, yet noncontiguous deposit in the eastern half of the block that was designated B2), this deposit was 10 to 15 cm (3.9 to 5.9 inches) thick, and yielded a total of 2,178 artifacts and 91 faunal specimens. The majority of the artifacts consist of kitchen-related items (N=1,543), dominated by ceramics (N=1,473). Bottle glass sherds, glass drinking vessel fragments, and pieces of glass tableware were also recovered. The 203 architectural artifacts from Stratum B mainly consist of nails (wrought, cut, and unidentifiable) and window glass (primarily broad glass). Brick fragments (N=225), unglazed redware (N=95), unidentified metal (N=54), and miscellaneous hardware (N=30) dominate the remainder of the assemblage. Present in minor quantities are items such as lamp globe/chimney glass, tobacco pipe fragments, pharmaceutical bottle/vial fragments, roofing slate, and unidentifiable glass. Fragments of solarized glass provide an 1880 TPQ for this stratum. The faunal remains from Stratum B consist mainly of oyster shell, together with clam shell, and bone fragments from pig, sheep/goat, medium mammal, unidentified mammal, and large mammal.

One prehistoric artifact was also recovered from Stratum B. This item is a piece of mica collected from this deposit in Test Unit 55.

Beneath Stratum A in the eastern half of the block were two deposits: Feature 4, and a layer of landscaping fill designated Stratum B2 (see Figure 14). Feature 4 was an irregularly-shaped deposit of dark yellowish brown loamy silt that partially overlies the brown to yellowish brown clay loam of Stratum B2 in this part of the East Block. The precise stratigraphic relationship between Feature 4, and Stratum B1 to the west, on the other hand, is unclear, at least according to the profile shown in Figure 15, where rodent disturbance has obscured the boundary between these two deposits. Field records, however, seem to indicate that Feature 4 was cut by Stratum B1.

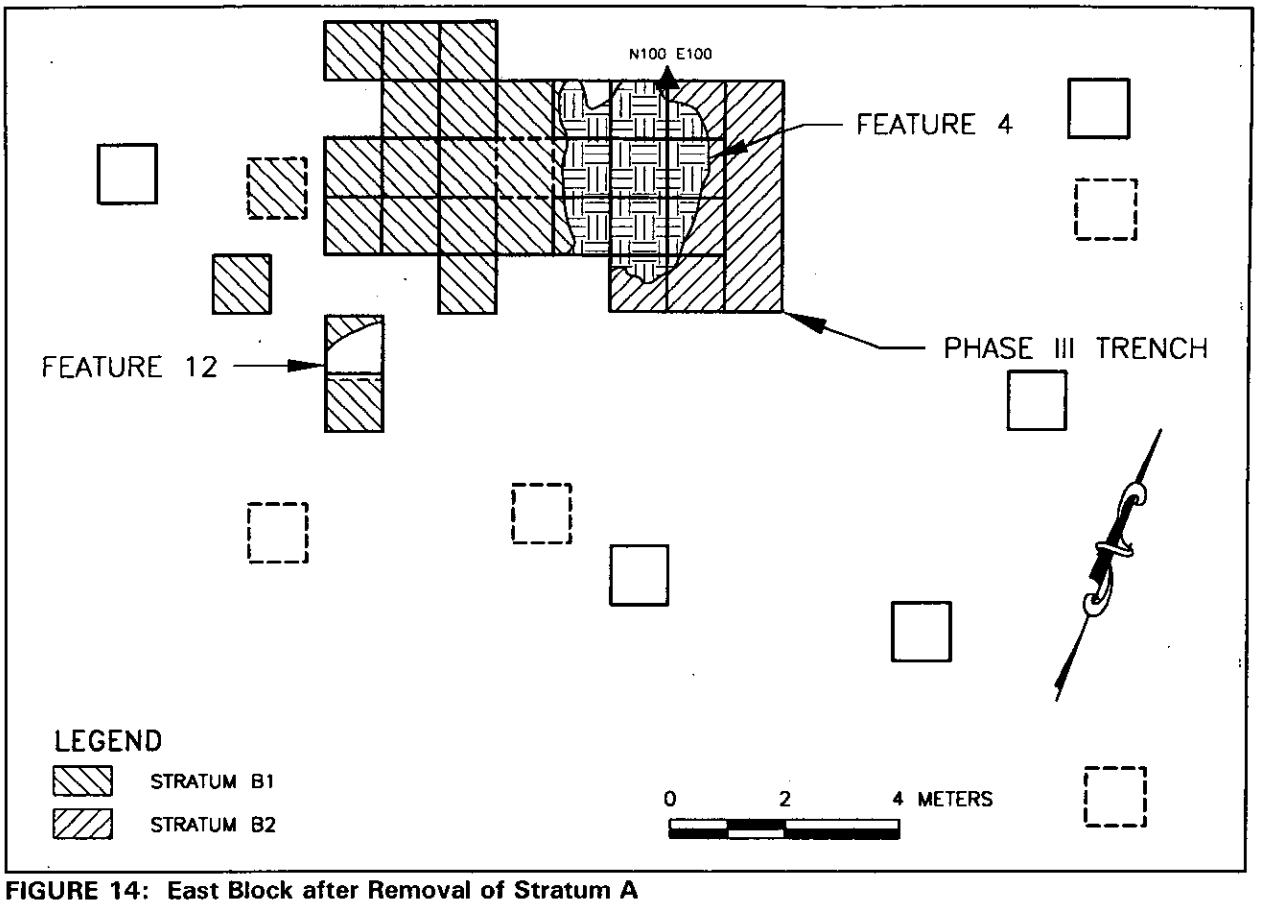


FIGURE 14: East Block after Removal of Stratum A

Over 2,400 artifacts were recovered during the excavation of Feature 4. Like the other deposits discussed previously, the majority of the Feature 4 artifacts are kitchen related (N=1,551) and include 1,459 ceramic fragments; the remainder of the kitchen items consist largely of bottle glass fragments (which provide a TPQ of 1857), along with drinking vessel, jar, and tableware sherds. The 277 artifacts related to architecture consist exclusively of nails (mostly unidentifiable, with smaller numbers of cut, wrought, and wire varieties) and window glass (primarily broad glass, together with a few fragments of crown glass). Also present in sizeable quantities are unglazed redware fragments (N=251) and pieces of brick (N=215). Buttons, furniture hardware, pharmaceutical bottle/vial fragments, unidentified metal and glass, pieces of lime, and miscellaneous hardware round out the assemblage. The faunal remains from Feature 4 primarily consist of oyster shell (and one specimen of clam); indeed, the 3.3 kilograms of oyster shell from the feature represent one of the densest concentrations of this material in the East Block. The 68 bone fragments recovered are mostly unidentifiable as to species, although pig and cow are represented.

Feature 4 was partially underlain by Stratum B2, a deposit of landscaping fill present in the extreme eastern part of the block (see Figure 14). This layer of dark yellowish brown to brown clayey loam ranged from 3 to 13 cm (1.2 to 5.1 inches) in thickness and yielded 492 artifacts and 78 faunal specimens. Over half of the assemblage consists of kitchen items (N=276), including

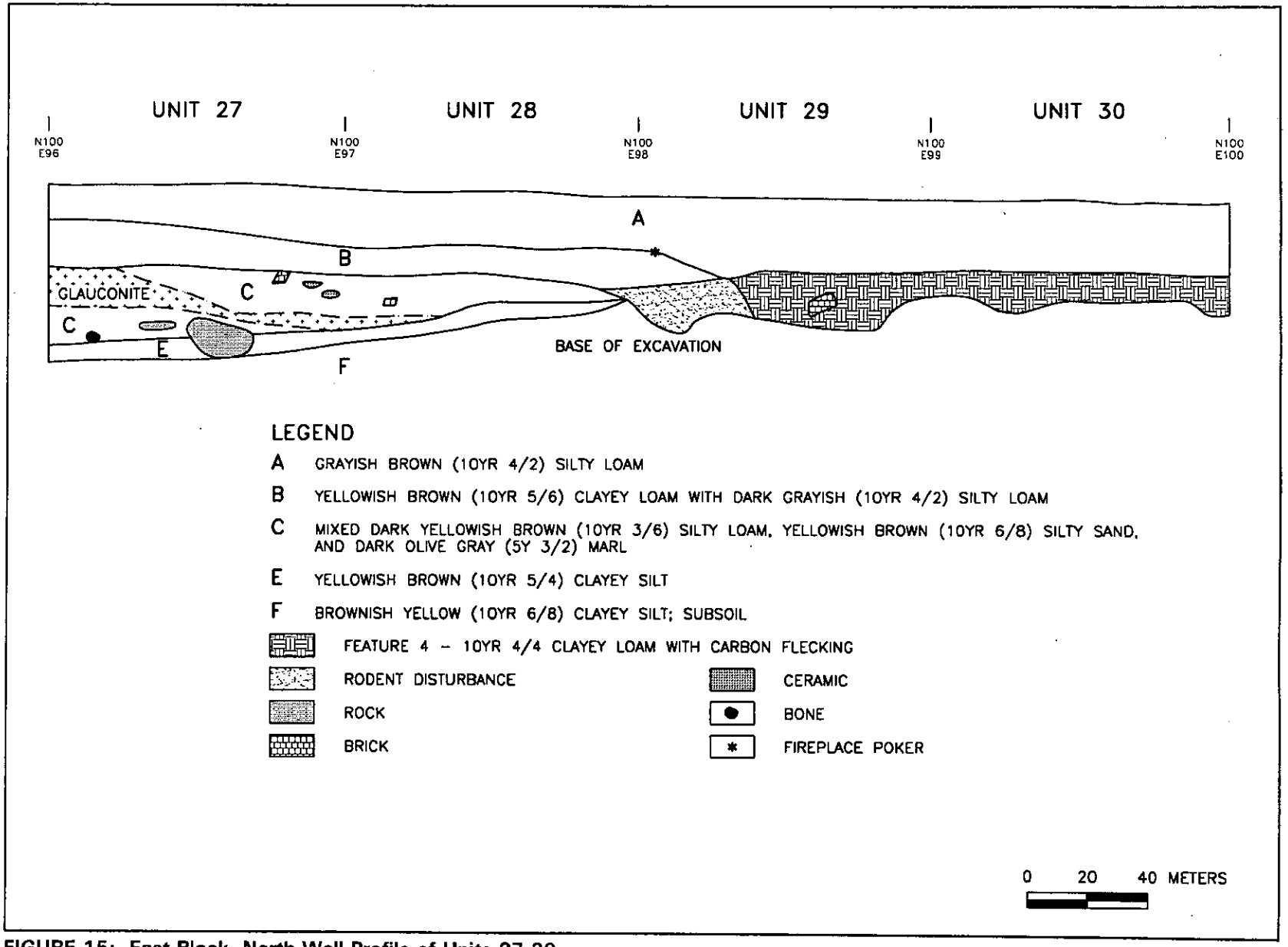


FIGURE 15: East Block, North Wall Profile of Units 27-30

263 ceramic fragments, 12 bottle glass sherds, and part of a glass tumbler. Whitewares and redwares constitute the majority of the ceramics assemblage from Stratum B2; also present are examples of pearlware, creamware, oriental porcelain, yellowware, and ironstone. An embossed ironstone rim sherd provides a TPQ of 1840 for this stratum. As in Feature 4, the non-brick architectural artifacts recovered (N=85) consist only of nails (wrought, cut, but mostly unidentifiable) and window glass (primarily broad glass). The remainder of the Stratum B2 historic artifact assemblage includes a button, tobacco pipe fragments, a slate pencil, brick fragments, unglazed redware, unidentified metal and glass, plaster, and pieces of lime. One prehistoric artifact, a quartz flake fragment, was also collected from Stratum B2. The faunal remains recovered from this deposit include oyster shell, and elements of pig, cow, medium mammal, large mammal, and unidentified mammal.

Feature 12, the fourth deposit exposed by the removal of Stratum A, was uncovered in Test Unit 63 (see Figure 14). Feature 12 was a 30-cm (11.8-inch-)-deep pit dug through Stratum B1, the two cultural strata beneath B1, and into the sterile subsoil. The feature fill was mixed, and consisted of very dark grayish brown and dark yellowish brown silty loam. The 222 artifacts collected from Feature 12 are predominately kitchen related, including 144 ceramic fragments, seven bottle sherds, two drinking vessel fragments, and two jar/container sherds. Typical of the East Block, the ceramics present in Feature 12 consist mainly of whitewares (plain, shell edge, dipped, handpainted, transfer-printed, and embossed) and redwares, together with a few fragments of pearlware, creamware, ironstone, and yellowware. A variety of blue shell edge whiteware provides a TPQ of 1840 for the feature fill. The 21 architectural items from the feature consist of 17 nails (wrought, cut, and unidentified) and four broad glass fragments. Unidentified metal (N=20), unglazed redware (N=8), brick (N=15), and unidentified glass (N=3) constitute the rest of the Feature 12 assemblage.

Eighty-eight faunal specimens were also recovered from Feature 12. Of these, 86 are oyster shell; the remaining two specimens include clam shell and a bone fragment that could only be identified as medium mammal.

The removal of Stratum B1 in the western half of the block exposed yet another fill deposit, a heavily mixed layer composed of silty loam, sandy silt, silty sand, and sand; the different soil matrices ranged in color from reddish yellow to dark yellowish brown. Designated Stratum C (Figure 16), this deposit also included a thin layer of glauconite (sometimes referred to as greensand marl) encountered at a minimum depth of 38 centimeters (15 inches) below grade. Consulting geomorphologist Dr. Daniel Wagner confirmed that this glauconite deposit had originated in deposits of much greater depth (Wagner, personal communication 1995), suggesting that it may be spoil from a deep excavation, perhaps for a well. A concentration of rubble and brick was encountered immediately below the redeposited glauconite layer in most of the test units in the western half of the block (see Figure 16). Although designated Feature 11, it, and the glauconite layer, were excavated as part of Stratum C.

The rubble comprising the bulk of Feature 11 consisted almost exclusively of fire-cracked and fire-reddened quartz and quartzite cobbles (Plate 11), together with a number of whole bricks and

large quantities of fragmentary brick. Interspersed among the rubble were faunal materials, large whiteware and black-glazed red earthenware sherds, and metal sheeting. Feature 11 contained only one layer or course of the cobbles and brick rubble.

PLATE 11: Feature 11 (Demolition Fill)

The horizontally restricted extent of the feature and its lack of great thickness, along with the fact that 95 percent of the cobbles exhibited evidence of thermal exposure, suggest that these cobbles were once part of a fireplace or firebed, rather than a building foundation; the soil beneath the feature did not show any evidence of having been exposed to intense heat. Such a feature from the Locust Grove house may have been dismantled and disposed of during the building additions and renovations of the 1870s. Alternatively, it was thought that Feature 11 might be associated with a still earlier structure which was located in what is now the front yard of the Locust Grove house. As will be seen, the former notion is more likely.

A total of 2,664 artifacts were recovered from Stratum C, the vast majority of which are kitchen related. Ceramic fragments (not including unglazed redware) are, by far, the most numerous artifact type present in this deposit, accounting for 1,859 of the items recovered. The predominant ware types are redware (several with slip-trailed decoration) and whiteware, the latter including a range of decorative varieties—shell edge, polychrome handpainted, transfer-printed, banded, dipped, and sponged. Fragments of soft- and hard-paste porcelain, pearlware (handpainted, transfer-printed, and sponged), creamware (plain), yellowware (mocha and Rockingham), and gray salt-glazed stoneware were also recovered. Bottle glass and other kitchen artifacts are present in relatively small numbers, as are architecture-related items such as nails (wrought, cut, and unidentified) and window glass (broad and crown varieties). Other artifacts recovered from Stratum C include a gunflint, buttons (one bone and one wood), a tobacco pipe fragment, pharmaceutical bottle/vial sherds, miscellaneous hardware; unidentified metal and glass, and pieces of lime. Brick fragments (N=243) and unglazed redware sherds (N=143) were also present. A complete patent medicine bottle ("Radway's Ready Relief"), the only intact glass container recovered from the site, is datable to 1877-1880, and provides the TPQ for Stratum C.

The faunal remains from Stratum C, like the faunal assemblages from other deposits at the site, consist mainly of oyster shell (1.5 kilograms). Clam shell was also recovered, as were a few examples of pig and cow bone and the remains of unspeciated mammal.

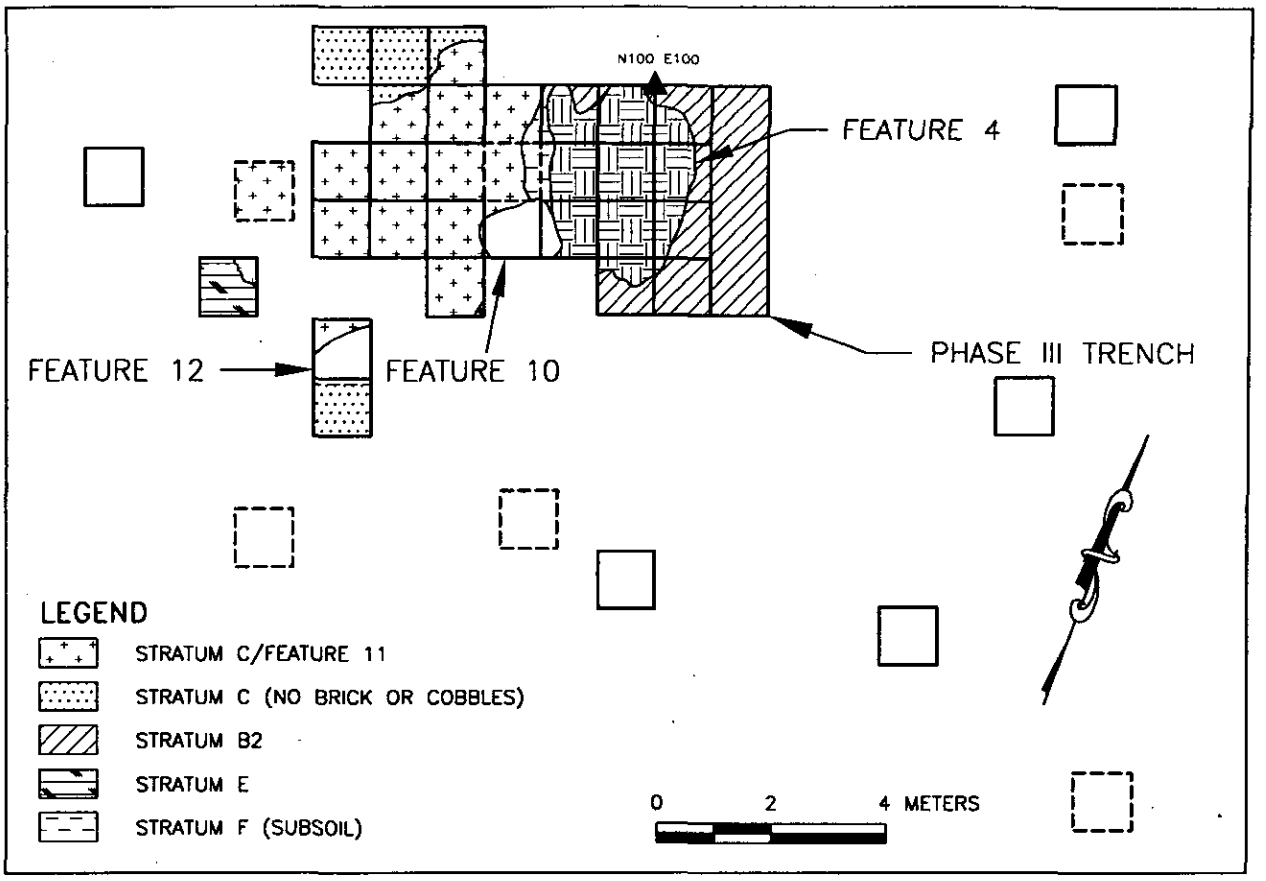


FIGURE 16: East Block after Removal of Stratum B1

Lying beneath Stratum B1 and adjacent to the western side of Feature 4 was Feature 10, a small, shallow, basin-shaped pit that cut into Stratum C (see Figure 16; Figure 17). The soil matrix of Feature 10 consisted of dark grayish brown silty loam with flecks of charcoal and large quantities of oyster shell. This deposit yielded 211 historic artifacts, including ceramics (redwares and whitewares), fragments of bottle and tableware glass, nails (cut, wrought, and unidentified), crown window glass, unidentified metal, brick, mortar, and unidentified glass. The TPQ for the feature is provided by a variety of shell edge whiteware first manufactured in 1840. Except for shell, the faunal remains recovered from Feature 10 were few in number, and include a pig molar and two fragments each from unidentified bird and unidentified mammal. The 3.2 kilograms of oyster shell collected from this relatively small deposit represent the densest concentration of this material encountered at Locust Grove.

The excavation of Stratum C/Feature 11 uncovered one additional artifact-bearing layer in the western half of the block. Designated Stratum E (Figure 18), this was a thin (7.5 to 10 centimeters [3 to 4 inches]) layer of light olive brown silty clay; excavation indicated that Feature 2, uncovered during the Phase II investigations, is an extension of Stratum E.

Stratum E contained a very dense concentration of historic kitchen-related refuse—in Test Unit 51 alone, for example, this deposit produced 344 historic artifacts and 59 mammal bone

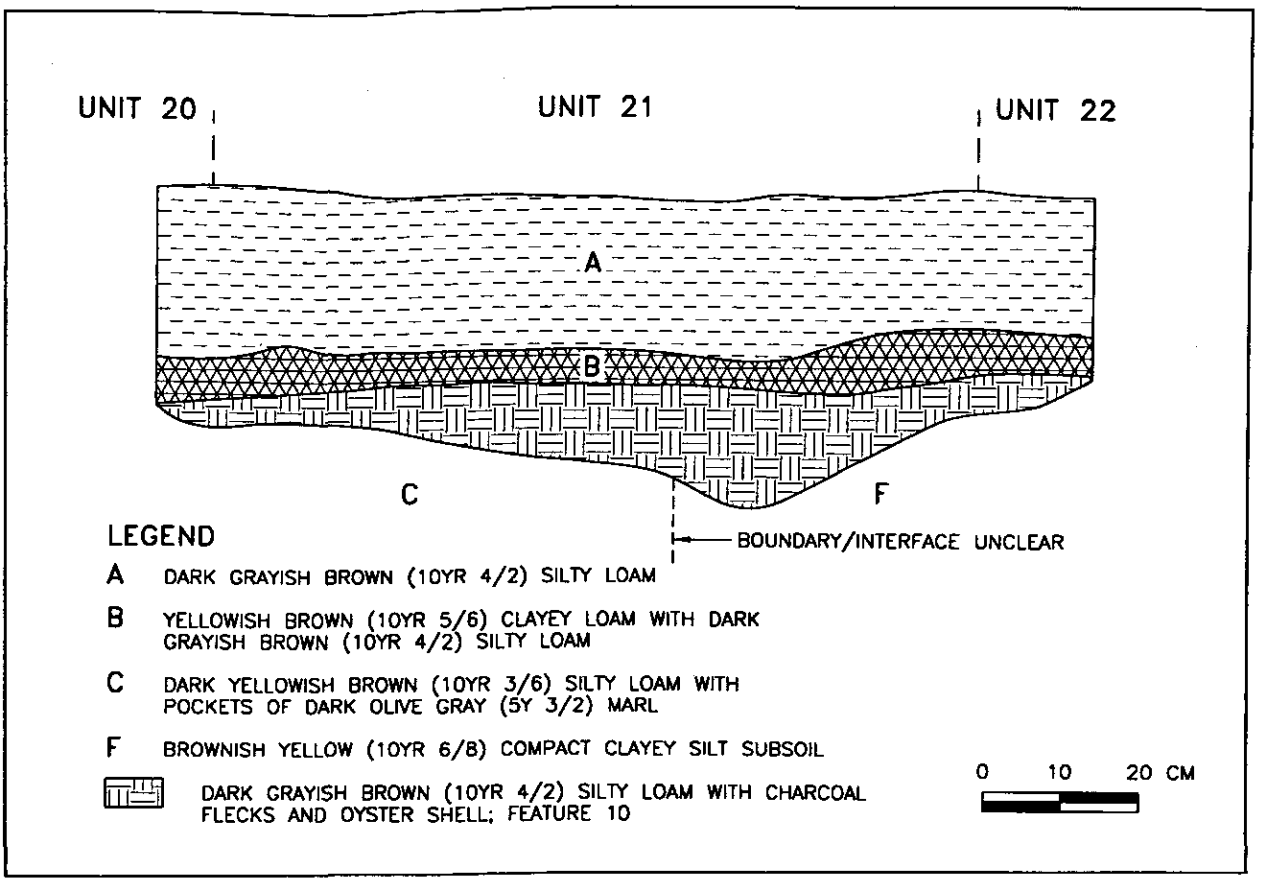


FIGURE 17: Feature 10, North Profile

fragments, while the entire stratum yielded 1,868 historic artifacts and 109 faunal specimens (not including oyster and clam shell). Like other depositional contexts in the East Block, Stratum E produced an artifact assemblage made up primarily of kitchen-related items. The 1,340 kitchen artifacts include 1,305 ceramic fragments, 22 glass bottle sherds, 12 tumbler/stemware fragments, and one example of glass tableware. The ceramic assemblage is made up primarily of whitewares and redwares; the former includes plain, shell edge, sponged, transfer-printed, handpainted, and embossed varieties, while most of the latter, except for a few slip-trailed sherds, are undecorated. Other ceramic types present in this deposit include pearlware, creamware, hard- and soft-paste porcelain, yellowware, and gray salt-glazed stoneware. A TPQ of 1846 for Stratum E is provided by fragments of a blue transfer-printed whiteware vessel with the "Texian Campaigne" design, that was produced until about 1860.

Brick, unglazed redware fragments, and pieces of unidentified metal were present in fairly substantial quantities (205, 112, and 80 examples, respectively). The 80 non-brick architectural items recovered from this deposit include wrought and unidentifiable nails, broad window glass, and a plumbing fixture. The remaining artifacts in the assemblage include glass pharmaceutical bottle/vial fragments, a gilt one-piece button, miscellaneous hardware, and unidentified glass.

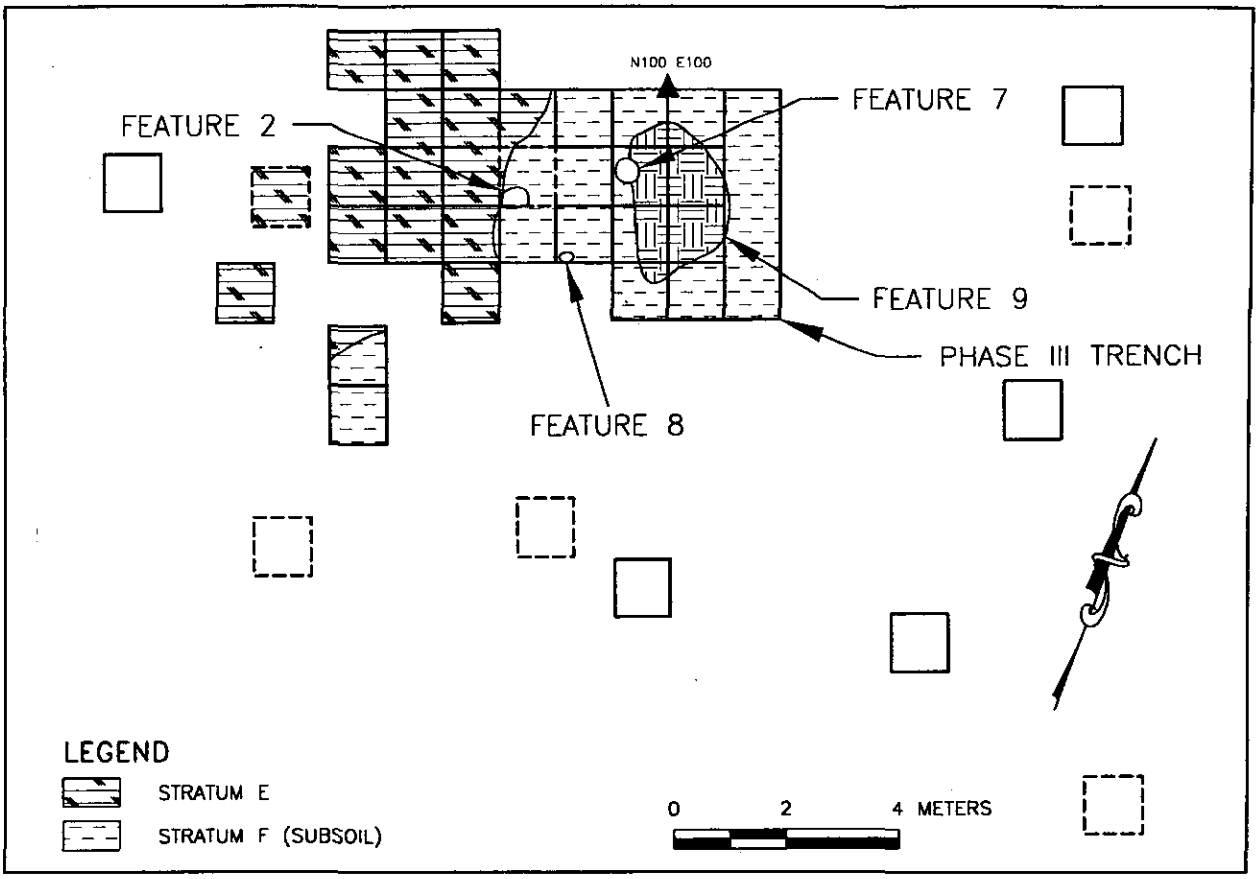


FIGURE 18: East Block after Removal of Feature 4 and Stratum C

The faunal assemblage from Stratum E consists mainly of oyster shell (2.57 kilograms); a small amount of clam shell was also recovered. The remainder of the assemblage includes elements of medium mammal (N=77), pig (N=23), cow (N=3), unidentified mammal (N=2), and chicken (N=1).

Returning to the eastern half of the block, the excavation of Feature 4 and the removal of Stratum B2 uncovered several features (Features 6, 7, 8, and 9) that extended into the subsoil (see Figure 18). Feature 6 was a small, square feature in Test Unit 25 that was identified as a post mold. It measured 10.16 cm (4 inches) on each side and extended to a depth of 6 to 7 cm (2.4 to 2.7 inches). No discernible surrounding posthole was identified, and no artifacts were recovered.

Feature 7, a small circular pit measuring 40 cm (15.7 inches) in diameter, was confined to Test Unit 26, and had apparently been truncated by Feature 4 (Figure 19). The feature fill consisted of a dark yellowish brown clayey loam with ash, and was differentiated from Feature 4 on the basis of soil texture (the latter being characterized by a dark yellowish brown loamy silt). Feature 7 proved to be 10 cm (3.9 inches) deep and produced a total of 16 historic artifacts and one faunal specimen. Ceramics account for eight of the artifacts recovered, and include plain and dipped pearlware, glazed redware, and plain whiteware; the latter type provides a TPQ of 1815

for the feature. An unidentified nail and seven brick fragments make up the rest of the assemblage. The faunal specimen recovered consists of an oyster shell fragment.

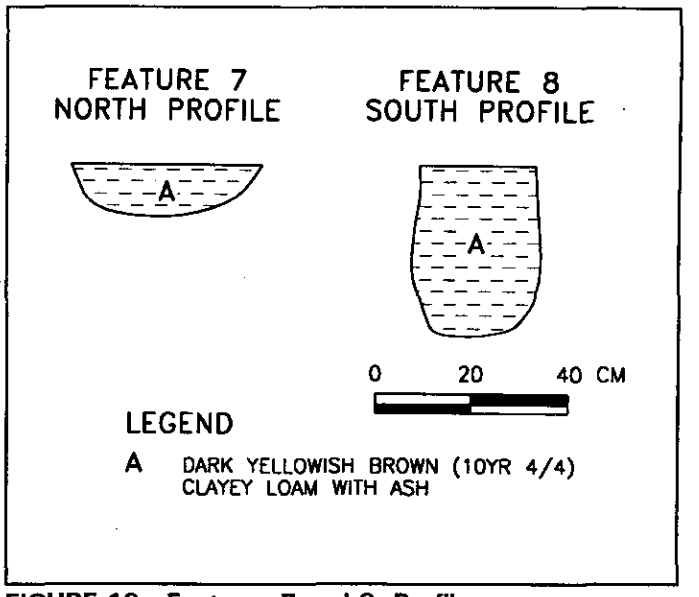


FIGURE 19: Features 7 and 8, Profiles

Feature 8, identified as a posthole, was uncovered in Test Unit 22 (see Figure 18). The feature measured 24 cm (9.4 inches) in diameter and 36 cm (14.1 inches) in depth; it was roughly cylindrical in cross section, tapering slightly inward near the bottom (see Figure 19). The feature fill consisted of dark yellowish brown clayey loam with ash (similar to the fill in Feature 7); there was no evidence of a post mold. Thirteen historic artifacts were recovered, including ceramics (plain pearlware and glazed redware), nails (wrought, cut, and wire–the latter providing a TPQ of 1850), and a fragment of unglazed redware. The feature also produced five faunal specimens, consisting of four bone fragments assignable only to medium mammal and one bone fragment assignable to unidentified mammal.

The last feature to be discussed is a possible prehistoric feature uncovered in the East Block (Feature 9). Feature 9 was encountered intruding into the natural subsoils below the historic deposits (Features 4 and 7 and Stratum B2) in the eastern section of the block (Test Units 59 through 62), and was distinguished from the natural subsoil on the basis of differences in texture and color. Feature 9 soils consisted of a brown loamy clay with charcoal flecks that intruded into natural subsoils of yellowish brown clay. Trench 1, measuring 1x4 meters, was excavated adjacent to the eastern side of the block in order to fully investigate Feature 9. As shown in Figure 20, Feature 9 was oval in plan and measured 2.5 meters (8.2 feet) north to south and 1.5 meters (4.9 feet) east to west. The east-to-west bisection profile of the feature (Figure 21) is shallow (5 centimeters [2 inches]) at its eastern edge, dropping down moderately steeply to form a deep pit (125 centimeters [49 inches] deep and 130 centimeters [51 inches] wide) in its western half (Plate 12). The plan view and bisection profiles of Feature 9 suggest a similarity to the Type 2A prehistoric pit house, as described in the Woodland I, Delaware State Plan (Custer 1994). However, the absence of any prehistoric artifacts of any kind within or surrounding this feature prohibits the delineation of any temporal and cultural affiliation. Historic artifacts were, on the other hand, recovered from the two excavated levels of the feature fill. Fifteen brick fragments were collected from Level 1 (the first 10 cm [3.9 inches] of fill), together with five unidentified mammal bone fragments. A single broad glass fragment (TPQ=1826) was recovered from Level 2 (10 to 54 cm [3.9 to 21.3 inches] below the top of the feature) in the southwestern portion of Feature 9.

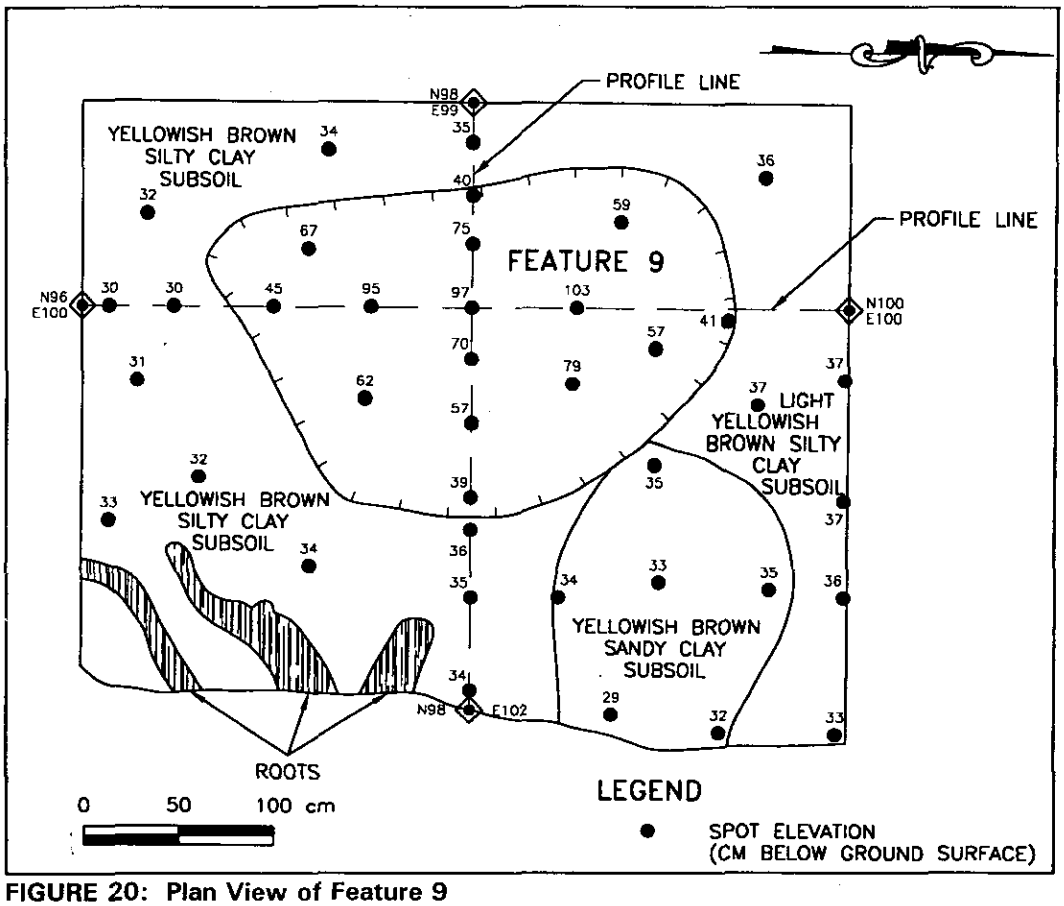


FIGURE 20: Plan View of Feature 9

To help in determining the age of the feature, several samples were taken for OCR dating. Once the fieldwork was complete, four samples—three from the feature fill and one control sample—were submitted to the Archaeological Consulting Team, Inc., in Essex Junction, Vermont. The control sample (ACT #2154), taken from the sterile subsoil outside the feature, yielded a calculated OCR date of 5,569 BP. One sample (ACT #2153), collected from the base of Level 1, was dated to 3,700 ± 110 years BP. The two earliest dates came from the top of Level 2 (ACT #2155), 5,915 ± 177 years BP, and from the base of Level 2 (ACT #2156), 6,100 ± 182 years BP.

4. Non-Block Excavations

An additional nine 1x1-meter test units were excavated in the front yard to search for and investigate additional features and cultural deposits. These test units (42 through 48, and 63 and 64) were oriented according to the grid established across the yard (see Figure 11). Three of these test units (46, 63, and 64) have already been discussed in connection with the East Block and will not be covered here.

Generally speaking, the stratigraphy uncovered in the non-block test units, as well as in the Phase II test units excavated in the front and side yards, consisted of one or more landscaping deposits

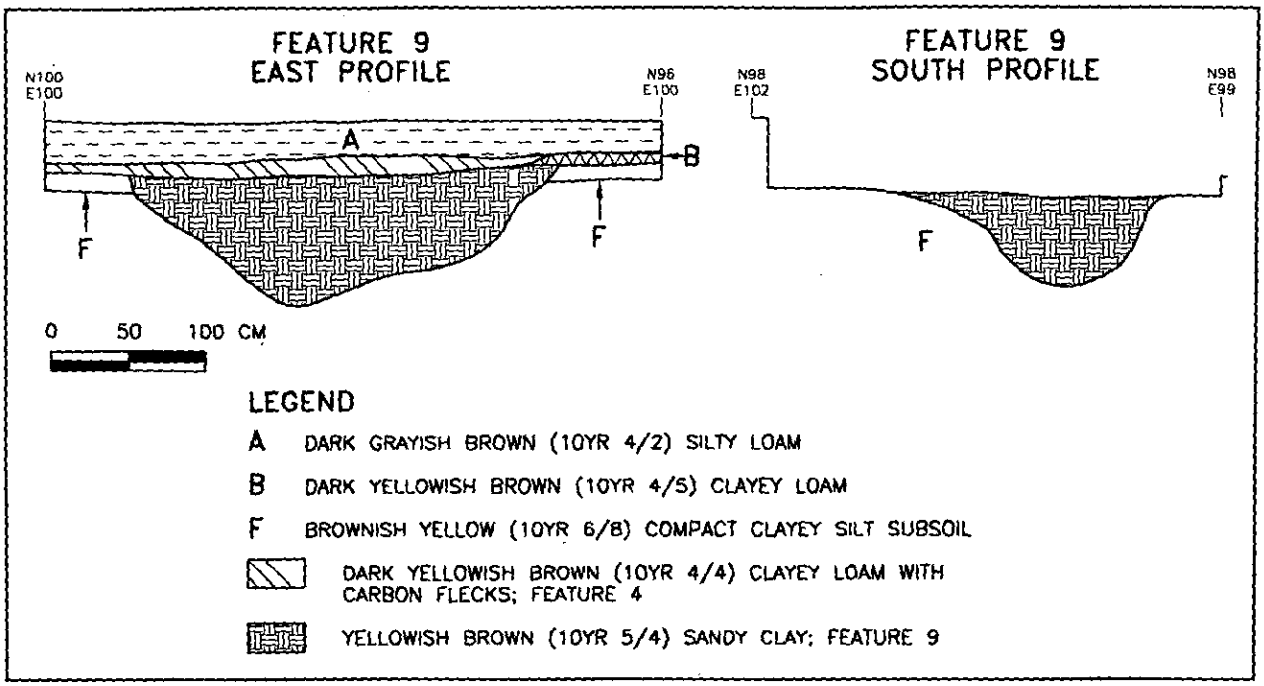


FIGURE 21: Feature 9, Profiles

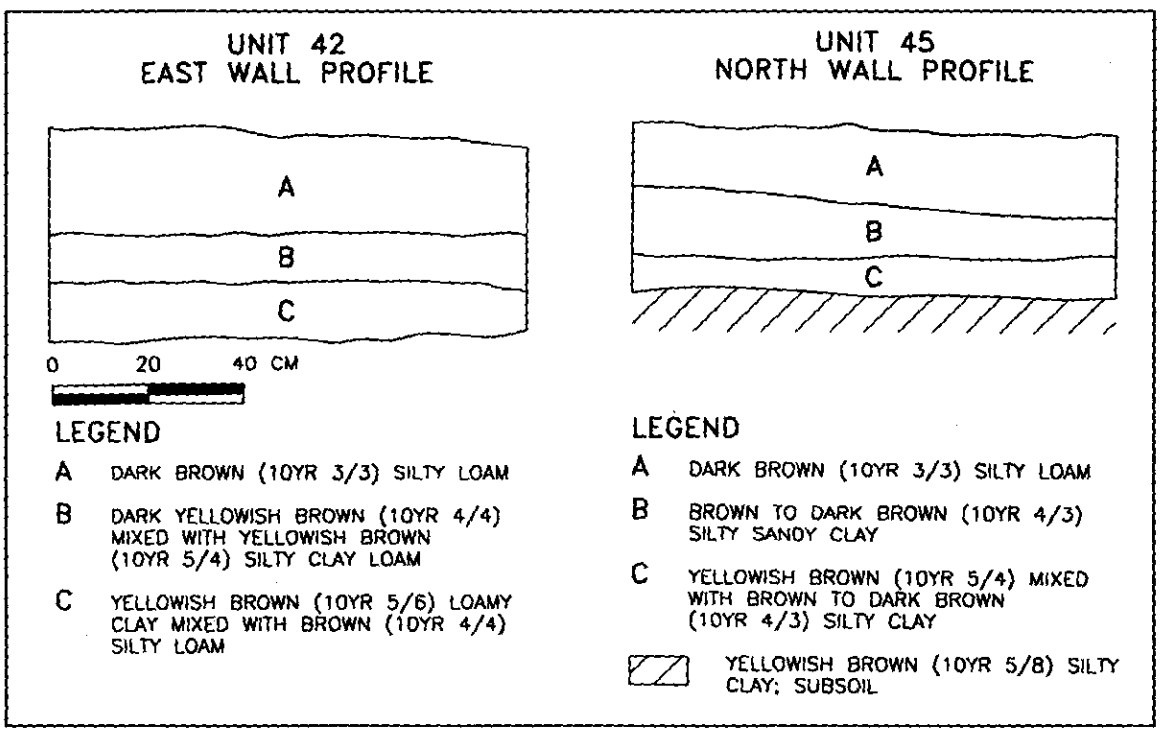


FIGURE 22: Units 42 and 45, Profiles

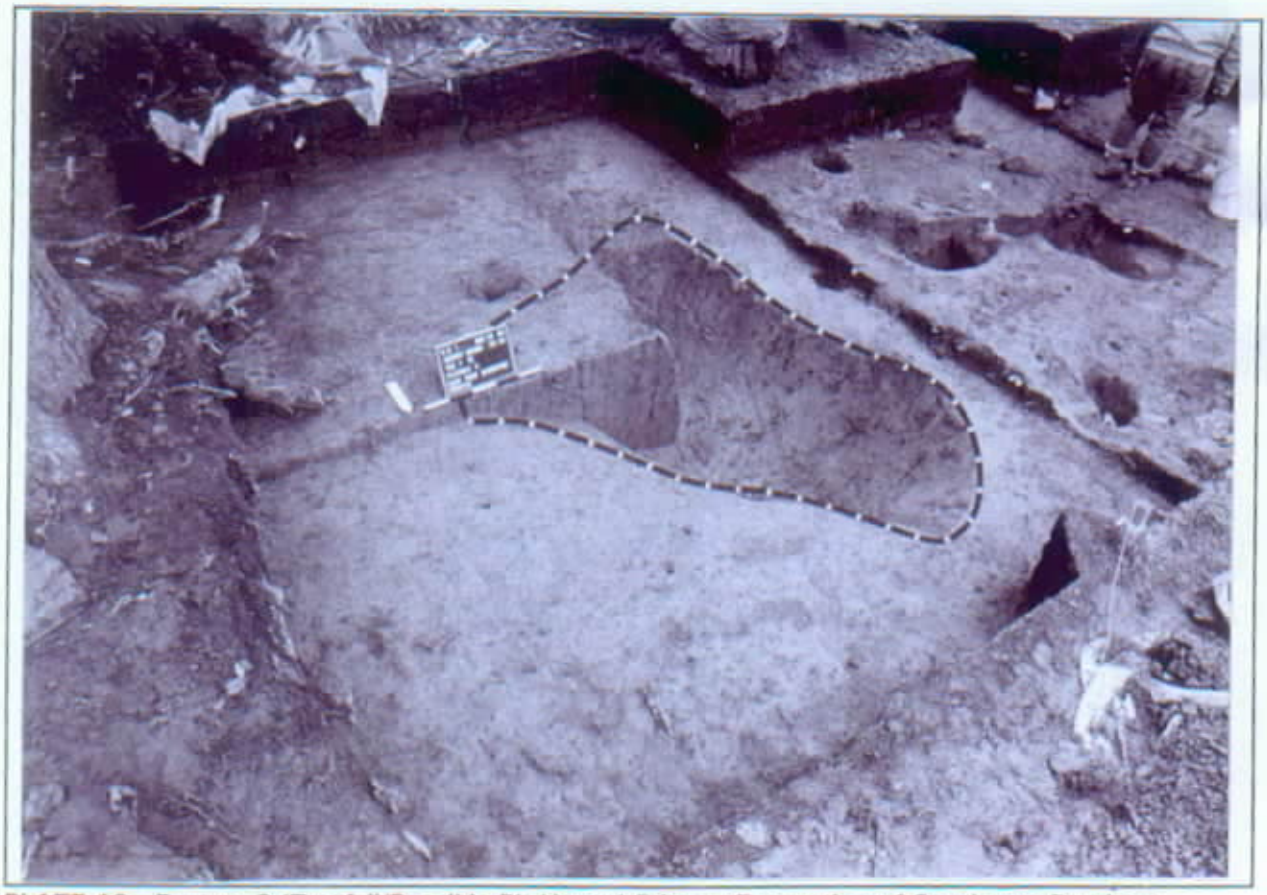


PLATE 12: Feature 9 (Treefall/Possible Pit House) Prior to Excavation of Southeast Quadrant

overlying the natural subsoil (Figure 22). The profiles of Test Units 42 and 45 are, perhaps, typical. In Test Unit 42, located in the front yard 12 meters south of the house, the silty loam topsoil-actually a combination of landscaping fill and sheet refuse—was underlain by a second landscaping deposit of mixed silty clay loam. The third stratum, a mottled loamy clay, represents the natural subsoil. Test Unit 45, placed 15 meters east of the East Block, likewise revealed three separate strata. Stratum A consisted of dark brown silty loam underlain by a mixed silty sandy clay fill deposit. The lowermost stratum in Test Unit 45 was a mottled silty clay that also appeared to be fill.

All of the non-block Phase III test units yielded historic artifacts that were, for the most part, similar in number and type to those recovered from the landscaping deposits in the two block excavations. As in the blocks, kitchen-related artifacts predominate and consist mainly of ceramics, with whitewares and redwares being the most heavily represented. Pearlware, ironstone, creamware, porcelain, and stoneware are also present. Other kitchen-related items include fragments of bottle, tumbler, and jar glass. Architectural materials include large numbers of brick fragments, together with the usual assortment of cut, wrought, and unidentified nails, broad and crown glass, a few miscellaneous fasteners (tacks and staples), and bits of plaster and mortar. Also scattered across the yard were a few buttons, a shoelace, a number of clay tobacco

pipe fragments, unidentified glass and metal, oyster shell, mammal bone, barbed wire, and miscellaneous hardware.

Two prehistoric artifacts were recovered from the non-block units: a piece of mica collected from the second landscaping deposit (Stratum B) in Test Unit 42, and the only diagnostic prehistoric artifact found at Locust Grove, a quartz Piney Island projectile point recovered from Stratum A in Test Unit 48, along with a number of historic artifacts.

VII. ANALYSIS

A. STRATIGRAPHIC UNITS

A series of stratigraphic units (SUs) were defined as a means for examining site formation processes at Locust Grove and for organizing the analysis of the artifact assemblages recovered from the various depositional contexts at Site 7NC-F-73. In essence, a stratigraphic unit is a formal device to "lump" or combine deposits from different excavation contexts, allowing analysis to proceed according to somewhat more inclusive data sets. As the name implies, the principal criteria for constructing each stratigraphic unit were soil color and texture, and stratigraphic position, i.e., depth below ground surface/datum and physical relationship to other stratigraphic contexts. It should be noted that only deposits in the two block excavations were assigned SU designations, the reason being that the blocks, and particularly the East Block, exposed relatively large portions of the site. Unlike isolated test units, the contiguous units that made up the block excavations allowed for the detailed examination of the stratigraphic relationships between deposits across a wide area, thus providing a clearer picture of the ways in which at least parts of the site, in this case the front and west side yards, were created. Several exceptions to the "rule" of contiguity have been made, however. As noted in the previous chapter, Test Units 8, 46, 63, and 64 were considered as part of the East Block excavation. Due to their proximity to the block, it was fairly easy to correlate the various stratigraphic contexts exposed in the open area excavation across the intervening space.

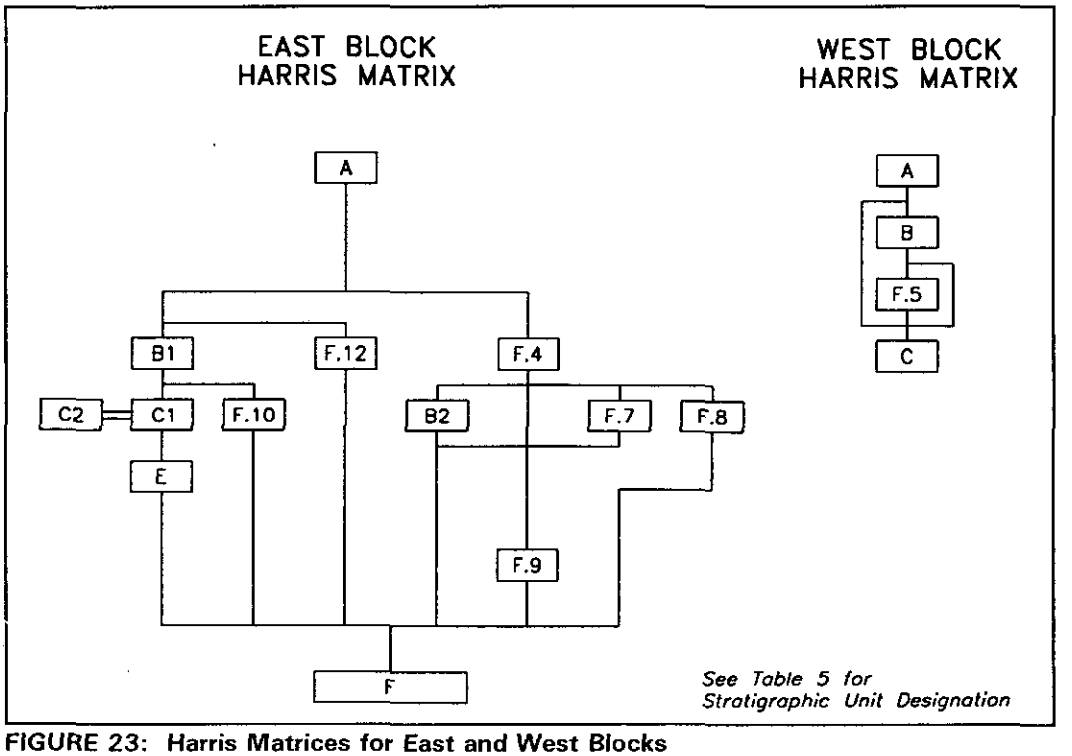


FIGURE 23: Harris Matrices for East and West Blocks

TABLE 5

STRATIGRAPHIC CONTEXTS, EAST BLOCK, LOCUST GROVE SITE (7NC-F-73)

STRATIGRAPHIC CONTEXTS	
STRATIGRAPHIC UNIT A	
Landscaping Deposit/Sheet Refuse Stratum A: Test Units 5, 8, 20-30, 46, 49-53, 61 Stratum B: Test Unit 22	Number of Artifacts = 1,813 MCD = 1851 (N=66*) TPQ = 1920
STRATIGRAPHIC UNIT B1	
Landscaping Deposit Stratum B: Test Units 5, 8, 20, 21, 24, 27, 28, 46, 49-52, 54-58, 63, 64 Stratum C: Test Unit 5	Number of Artifacts = 2,178 MCD = 1860 (N=92) TPQ = 1880
STRATIGRAPHIC UNIT B2	
Landscaping Deposit Stratum B: Test Units 25, 29, 30, 53, 59-62	Number of Artifacts = 491 MCD = 1849.5 (N=26) TPQ = 1840
STRATIGRAPHIC UNIT C1 (includes Feature 11)	
Landscaping Deposit/Demolition Fill Stratum C: Test Units 5, 8, 20, 21, 24, 27, 28, 49-52, 55-57, 63, 64 Stratum D: Test Units 5 and 24 Stratum E: Test Unit 5	Number of Artifacts = 2,242 MCD = 1855 (N=72) TPQ = 1877
STRATIGRAPHIC UNIT C2	
Fill/Landscaping Deposit Stratum C: Test Units 46, 54, 58	Number of Artifacts = 422 MCD = 1849 (N=15) TPQ = 1840
STRATIGRAPHIC UNIT E	
Surface/Midden Stratum E: Test Units 8, 20, 24, 27, 28, 49-52, 54-58, 63, 64	Number of Artifacts = 1,868 MCD = 1851 (N=88) TPQ = 1846
FEATURE 2 (associated with Stratigraphic Unit E)	
Pit Test Unit 5	Number of Artifacts = 42 MCD = 1843 (N=9) TPQ = 1830
FEATURE 4	
Filled Depression/Refuse Deposit Test Units 22, 23, 25, 26, 29, 30, 53, 59-62	Number of Artifacts = 2,435 MCD = 1857 (N=64) TPQ = 1857
FEATURE 7	
Pit Test Unit 26	Number of Artifacts = 16 TPQ = 1830
FEATURE 8	
Possible Post Test Unit 22	Number of Artifacts = 13 TPQ = 1850
FEATURE 9	
Possible Pit House/Treefall Test Units 23, 26, 30, 53, 59-62; Trench 1	Number of Artifacts = 16 TPQ = 1820
FEATURE 10	
Filled Depression/Refuse Deposit Test Units 21 and 22	Number of Artifacts = 211 MCD = 1855 (N=20) TPQ = 1840
FEATURE 12	
Pit/Refuse Deposit Test Unit 63	Number of Artifacts = 222 MCD = 1856 (N=19) TPQ = 1840

* Number of vessels

TABLE 6

STRATIGRAPHIC CONTEXTS, WEST BLOCK, LOCUST GROVE SITE (7NC-F-73)

STRATIGRAPHIC CONTEXT	NUMBER OF ARTIFACTS
STRATIGRAPHIC UNIT A	
Landscaping Deposit/Sheet Refuse Stratum A: Test Units 3, 4, 31-41	Number of Artifacts = 2,136 MCD = 1861 (N=31*) TPQ = 1965
STRATIGRAPHIC UNIT B	
Landscaping Deposit Stratum B: Test Units 4, 32-41	Number of Artifacts = 973 MCD = 1828 (N=10) TPQ = 1880
FEATURE 5	
Pit/Filled Depression/Refuse Deposit Test Units 33-41	Number of Artifacts = 764 MCD = 1823 (N=16) TPQ = 1883

* Number of vessels

The SUs are summarized in Tables 5 and 6; generally speaking, each SU follows the stratum designations assigned in the field, so SU A corresponds to Stratum A, and so forth. However, in several instances it was possible to combine strata, again, based on soil characteristics. In a couple of cases, strata were split—this was discussed earlier in reference to Stratum B in the East Block, and is also true for Stratum C, also in the East Block. The latter was divided into SU C1, corresponding to the limits of Feature 11, and SU C2, which lay beyond the feature. Features retained their in-field designations.

Once the analysis of the field data had been completed and SUs assigned, it was then possible to reconstruct the stratigraphic relationships in the two blocks. Because of the size of the excavations, particularly the East Block, it was not possible to show all of the various strata and features in a single profile drawing or set of drawings. Using the matrix developed by Edward Harris (1989), it is possible, however, to depict the stratigraphic sequences in the two blocks schematically. The Harris Matrix for the two blocks is presented in Figure 23.

Crossmends are also indicative of the relationships between stratigraphic units. As noted in Tables 5 and 6, many, if not most, of the deposits excavated in the two blocks appear to be the result of landscaping activities. Landscaping could involve cutting and filling and the movement of soils from one part of the site to another, resulting in the mixture of earlier and later materials which can obscure or even eliminate their original use or depositional contexts (LBA 1994).

Ceramic crossmends, recorded during analysis and summarized in Table 7, indicate the extent to which this has occurred in the front and side yards of Locust Grove. Sherds from the two most extensive intact nineteenth-century deposits in the East Block, Feature 4 and SU E, mend with fragments from overlying deposits, indicating a degree of truncation and subsequent mixing. For

TABLE 7

FREQUENCY OF CERAMIC CROSSMENDS
EAST BLOCK, LOCUST GROVE SITE (7NC-F-73)

PROVENIENCE	STRATIGRAPHIC UNIT					FEATURE		
	A	B1	B2	C1	E	4	10	12
A	.	5	1	7	2	6	.	.
B1	5	.	.	8	.	3	1	1
B2	1	.	.	.	.	1	.	.
C1	7	8	.	.	3	3	.	.
E	2	.	.	3	.	2	.	.
Feature 4	6	3	1	3	2	.	.	1
Feature 10	.	1	.	.	.	.	.	1
Feature 12	.	1	.	.	.	1	1	.

example, eight mends were identified between Feature 4 and the overlying SU A, while a number of mends were also noted between the feature and landscaping deposits in the western half of the block. Sherds from SU E mend with fragments from the immediately overlying SU C1, as well as with sherds from SU A and from Feature 4. Mixing was also evident in the West Block, but to a much lesser extent. Only one mend was noted between Feature 5 and the overlying deposits, while three crossmends were documented between SU A and SU B.

B. ARTIFACT ANALYSIS

1. Introduction

As shown in Table 8, over 22,000 artifacts were recovered during the three phases of investigation at Site 7NC-F-73, 14,670 of which are identifiable in terms of the functional categories described by South (1977). The majority of the Locust Grove artifacts fall into South's (1977) Kitchen Group, which is dominated by ceramics; bottles and other kitchen-related glassware are represented by relatively minor percentages of the functionally identifiable artifacts. Architectural items (not including brick and other building materials) make up less than one quarter of the collection, and consist mainly of nails (many of which are too corroded to identify) and window glass. Activities-related artifacts, the third most highly represented functional group, account for just over four percent of the Locust Grove collection. The majority of these items are classified as being associated with household activities, and consist almost entirely of unglazed redware flowerpot sherds. The other functional groups (Arms, Furnishings, Clothing, Personal, and Tobacco) are all represented in the Site 7NC-F-73 collection by relatively small numbers of artifacts, and none of these groups account for more than 0.51 percent of the functionally identifiable items. The balance of the collection, as noted at the bottom of Table 8, consists of brick and other building materials (mortar, roofing slate, and plaster), unidentifiable

TABLE 8

ARTIFACT PATTERN ANALYSIS, LOCUST GROVE SITE (7NC-F-73)

ARTIFACT GROUP/CLASS	COUNT	PERCENTAGE
KITCHEN		
Ceramics	9,348	63.72
Bottles	831	5.66
Tumblers/Stemware	87	0.59
Jars/Containers	58	0.39
Tableware	45	0.31
Other	9	0.06
Kitchen Subtotal	10,378	70.74
ARCHITECTURAL		
Wrought Nails	*276*	*1.88*
Cut Nails	564	3.84
Wire Nails	181	1.23
Unidentified Nails	1,042	7.10
Crown Glass	88	0.60
Broad Glass	994	6.78
Other Window Glass	183	1.25
Architectural Hardware	8	0.05
Tacks, Staples, etc.	14	0.09
Plumbing/Electrical	3	>0.05
Architectural Subtotal	3,353	22.86
FURNISHINGS		
Lighting Related	19	0.13
Furniture Hardware	9	0.06
Furnishings Subtotal	28	0.19
ARMS		
Cartridges	8	0.05
Gunflints	1	>0.05
Arms Subtotal	9	0.06
CLOTHING		
Fasteners	25	0.17
Sewing	3	>0.05
Shoes	3	>0.05
Clothing Subtotal	31	0.21
PERSONAL		
Coins	5	>0.05
Hygiene/Grooming	8	0.05
Jewelry	3	>0.05
Pharmaceutical	53	0.36
Other	6	>0.05
Personal Subtotal	75	0.51

Table 8 (continued)

ARTIFACT GROUP/CLASS	COUNT	PERCENTAGE
TOBACCO PIPES		
Tobacco Pipes	14	0.09
Tobacco Subtotal	14	0.09
ACTIVITIES		
Hardware	145	0.99
Farm Related	9	0.06
Livestock	3	>0.05
Tools	7	0.05
Writing	2	>0.05
Household	603	4.11
Toys	10	0.07
Miscellaneous	3	>0.05
Activities Subtotal	782	5.33
SITE TOTAL *	14,670	100.00

*Does not include faunal (1,151), floral (11), building materials (3,485), unidentifiable unglazed redware (895), unidentified glass (764), unidentified metal (479), and miscellaneous (159)

glass, unidentified metal fragments, unglazed redware sherds that could not be identified as to function, faunal and floral remains, and miscellaneous artifacts. The latter category includes items such as plastic, rubber, pieces of lime, and other unidentified artifacts.

2. *Kitchen Artifacts*

As shown in Table 8, 70.74 percent of the Locust Grove assemblage consists of kitchen-related artifacts, a total of 10,378 items. Of these, the overwhelming majority are ceramic fragments (12,816), accounting for 90.1 percent of the kitchen assemblage. Whitewares, first produced around 1815, and redwares are by far the most highly represented ware types at Site 7NC-F-73, and make up 42.8 and 43.9 percent, respectively, of the ceramic assemblage. Along with whiteware, other nineteenth- and twentieth-century ceramic types recovered from the site include ironstone and yellowware, which together account for an additional 1.4 percent of the site-wide ceramic assemblage. Earlier ware types (i.e., eighteenth and early nineteenth centuries), include 274 creamware (2.9%), 605 pearlware (6.5%), seven delft (>0.1%), three white salt-glazed stoneware (>0.1%), two early cream-colored refined earthenware (>0.1%), four yellow-bodied lead-glazed earthenware (>0.1%), and 38 refined red-bodied earthenware (0.4%). Also recovered were 41 fragments of gray salt-glazed stoneware (0.4%), 42 fragments of hard-paste porcelain (0.4%), 16 sherds of oriental porcelain (0.2%), and four fragments of soft-paste porcelain (>0.1%).

A total of 981 ceramic vessels were reconstructed from fragments recovered during the Locust Grove investigations (Table 9). Over 80 percent of the vessels from the site are either redware (40.16%) or whiteware (39.96%). Of the remainder, pearlware is represented by 80 vessels, accounting for just over eight percent of the total. Yellowware, creamware, stoneware, hard-paste

TABLE 9

SITEWIDE CERAMIC MNVS BY WARE TYPE, LOCUST GROVE SITE (7NC-F-73)

WARE TYPE	COUNT	PERCENTAGE
Redware	394	40.2
Whiteware	392	40.0
Pearlware	80	8.2
Yellowware	21	2.1
Creamware	20	2.0
Stoneware	18	1.8
Hard-Paste Porcelain	13	1.3
Ironstone	12	1.2
Refined Red Earthenware	10	1.0
Oriental Porcelain	7	0.7
Soft-Paste Porcelain	4	0.4
Delft	3	0.3
Unidentified Refined Earthenware	3	0.3
Buff/White-Bodied Earthenware	2	0.2
Early Cream-Colored Earthenware	1	0.1
Buff/Yellow-Bodied Earthenware	1	0.1
TOTAL	981	100.0

porcelain, ironstone, and refined red earthenware together account for an additional 9.58 percent. The balance of the vessel assemblage is comprised of oriental porcelain, soft-paste porcelain, delft, unidentified refined earthenware, buff/white-bodied earthenware, early cream-colored earthenware, and buff/yellow-bodied earthenware.

Of the functionally identifiable vessels, tablewares are predominant (Table 10), followed in order of frequency by teaware; food storage vessels; multifunctional wares (essentially kitchen vessels, such as dishes or pans, used for both food preparation and service); miscellaneous (mainly flowerpots); food preparation vessels, which, in this instance, mainly consist of milk pans; hygiene wares (chamberpots); household-related vessels; and beverage containers. As shown in Table 10, 398 of the reconstructed vessels (40.6%) were unidentifiable as to function, although most appear to be hollowwares. The high percentage of unidentified vessels is due to their low completeness. Only 11 vessels (1.1%) in the Locust Grove assemblage are more than 26 percent complete; of those that fall into the 0-25 percent range, most are near the very low end and many are represented by only one or two sherds. The extremely low completeness of these vessels suggests that the principal refuse deposits for broken ceramics lay elsewhere on the property.

The ceramic vessel assemblage, arranged in Table 11 by function and ware type, falls into a predictable pattern for a site occupied for much of the nineteenth century. All but two of the

TABLE 10

SUMMARY OF CERAMIC VESSEL FUNCTIONS, LOCUST GROVE SITE (7NC-F-73)

FUNCTION	COUNT	PERCENTAGE
Teawares	156	15.9
Tablewares	238	24.3
Food Preparation	25	2.6
Food Storage	66	6.7
Hygiene	6	0.6
Household	2	0.2
Multifunction (food storage)	63	6.4
Beverage	1	0.1
Miscellaneous	26	2.6
Unidentified	398	40.6
TOTAL	981	100.0

identifiable kitchen-related redware vessels are associated with food preparation, storage, or the multifunctional category of food preparation/service (for example, baking dishes that could be brought to the table). The refined wares (pearlware, whiteware, ironstone, creamware, and porcelain), on the other hand, are largely teawares (cups, saucers, and bowls) and tablewares (plates, platters, serving bowls, and tureens). Of the three identifiable yellowware vessels, one (a bowl) is classified as tableware, and two are classified as food preparation/serving forms. The two identifiable stoneware vessels were used for food storage; of the three refined red earthenware vessels, two (including an engine-turned teapot) are classified as teaware, while the third falls into the multifunctional category (see Table 11).

Of the 583 functionally identifiable vessels recovered from the site, 578 were collected from the East (N=493) and West (N=85) blocks. The distributions of these vessels by provenience, ware type, variety, and function are presented in Appendices D and E.

Apart from the marked difference in the number of reconstructed vessels, the two block excavations were also characterized by differences in the variety of wares present. For example, 23 of the vessels from the West Block (over one-quarter) are unglazed redware flower pots, most of which were recovered from SU A. In contrast, only three flower pots were present in all of the East Block. By factoring out the unglazed redware, the two blocks contain comparable percentages of redware vessels (26.8% in the East Block, and 27.3% in the West Block [with most from Feature 5]), although the West Block produced no glazed redware milk pans compared to the 23 recovered from the East Block (see Appendices D and E). On the other hand, porcelain teaware and tableware vessels are more prevalent, both in absolute numbers and in percentage, in the West Block.

TABLE 11

SITEWIDE CERAMIC MNVS BY WARE TYPE AND FUNCTIONAL CATEGORY
LOCUST GROVE SITE (7NC-F-73)

WARE TYPE	FUNCTIONAL CATEGORY										TOTAL
	Teaware	Tableware	Food Prep	Food Storage	Hygiene	Household	Multi-function	Beverage	Misc.	Unident.	
Redware	.	2	25	64	3	.	60	1	26	213	394
Whiteware	114	186	.	.	3	2	.	.	.	87	392
Pearlware	27	31	.	.	.	.	.	.	.	22	80
Yellowware	.	1	.	.	.	.	2	.	.	18	21
Creamware	.	8	.	.	.	.	.	.	.	12	20
Stoneware	.	.	.	2	.	.	.	.	.	16	18
Hard-Paste Porcelain	.	5	.	.	.	.	.	.	.	8	13
Ironstone	7	4	.	.	.	.	.	.	.	1	12
Refined Red Earthenware	2	.	.	.	.	.	1	.	.	7	10
Oriental Porcelain	5	.	.	.	.	.	.	.	.	2	7
Soft-Paste Porcelain	1	1	.	.	.	.	.	.	.	2	4
Delft	.	.	.	.	.	.	.	.	.	3	3
Unident. Refined	.	.	.	.	.	.	.	.	.	3	3
Buff/White Earthenware	.	.	.	.	.	.	.	.	.	2	2
Buff/Yellow Earthenware	.	.	.	.	.	.	.	.	.	1	1
Early Cream-Colored	.	.	.	.	.	.	.	.	.	1	1
TOTAL	156	238	25	66	6	2	63	1	26	398	981

Overall, the functionally identifiable wares from the West Block are rather limited in their variety. In SU A, which yielded a total of 44 vessels, 15 (over one-third) are unglazed redware flower pots, while the five remaining redware vessels include four multifunctional forms (preparation and serving vessels) and a glazed pan used for food preparation. Tablewares include a plate, bowl, and miscellaneous forms in plain porcelain, a plain pearlware plate, three shell edge pearlware plates (one blue and two green shell edge), and a pearlware plate with an embossed rim motif. Table forms in whiteware include an undecorated bowl and two miscellaneous tablewares, a blue transfer-printed plate, an overglaze decal-decorated plate (1880-1990), and a bowl with simple banded decoration. Teawares from SU A include an overglaze-decorated oriental porcelain saucer/bowl, a plain creamware cup, an engine-turned refined red earthenware teapot, a miscellaneous form in plain pearlware, an underglaze blue handpainted cup, a miscellaneous form in underglaze polychrome handpainted pearlware, and a plain whiteware saucer. Fragments of a colored glaze whiteware jardiniere, an ornamental container used for plants or flowers or to hold a flowerpot, were also present.

Sherds from only 10 identifiable vessels were recovered from SU B, seven of which are redwares—six flowerpots and a glazed food preparation/serving vessel. Refined wares from SU B include a feather-edge creamware plate, a green shell edge pearlware plate, and a Victorian majolica jardiniere (1870-1900).

Feature 5 contains the earliest ceramic assemblage identified at Locust Grove, with the 16 datable vessels yielding an MCD of 1824. The mean beginning and mean ending dates of 1776 and 1871 derived from these vessels, however, span nearly a century, a period during which the property was occupied by a number of households, including both owners and tenants. The fact that the ceramics in Feature 5 were recovered along with bottle glass postdating 1880 suggests that these vessels were deposited as part of a clean-up effort toward the end of the nineteenth century.

Among the 31 reconstructed vessels in Feature 5 are 19 redware forms (61% of the assemblage), including two flowerpots, six glazed storage jars, a porringer, a chamberpot, and nine food preparation/serving vessels. The latter include two cookpots that would be brought to the table, and five trailed slipware pans used for baking and serving.

The refined wares include porcelain, ironstone, pearlware, thin-bodied red earthenware, and whiteware. The 11 teawares, which account for nearly all of the non-redware vessels from Feature 5, include cups and/or saucers/bowls in plain oriental porcelain, overglaze decorated oriental porcelain, plain ironstone, plain and blue underglaze handpainted pearlware, and plain and embossed whiteware. An engine-turned red earthenware teapot is also represented in the assemblage. The single refined tableware form in this deposit is a plain oriental porcelain plate.

The 493 functionally identifiable vessels from the East Block excavations are quite varied in terms of ware types and decorative varieties. Moreover, none of the East Block ceramic assemblages can be attributed to a single household. As shown in Table 12, the mean beginning and mean ending dates for the ceramic vessel assemblages (not including redware) span a minimum of 56 years, from the 1810s to the turn of the twentieth century, encompassing the

TABLE 12

MEAN BEGINNING AND MEAN ENDING DATES
EAST AND WEST BLOCKS, LOCUST GROVE SITE (7NC-F-73)

PROVENIENCE	NUMBER OF VESSELS	MEAN BEGINNING DATE	MEAN ENDING DATE
EAST BLOCK			
SU A	66	1812	1890
SU B1	92	1817	1902
SU B2	26	1811	1888
SU C1	72	1817	1893
SU C2	15	1819	1879
SU E	88	1819	1884
Feature 2	9	1815	1871
Feature 4	64	1817	1898
Feature 10	20	1814	1895
Feature 12	19	1820	1892
WEST BLOCK			
SU A	31	1811	1910
SU B	10	1799	1858
Feature 5	16	1776	1871

households of Samuel Pennington, Pere Hendrickson, Samuel Pennington, Jr., James Hoffecker, and Franklin Pennington. The MCDs for the East Block deposits almost all fall into the period 1849-1860 (see Table 12), and with the exception of a single unidentifiable decal-decorated piece, none of the East Block vessels have beginning dates of manufacture later than 1850. Because of the broad time span represented by the various assemblages, Miller's CC Index (Miller 1980, 1991), which, under suitable conditions, can provide a scale to evaluate a household's expenditures for ceramics, was not employed. For Locust Grove, or for any site, the utility of averaging the ceramic values from several households is questionable. However, some general observations concerning the acquisition and use of ceramics by the occupants of Locust Grove during the nineteenth century can be made.

As shown in Appendix D, redware vessels recovered from the East Block deposits make up the lion's share of the utilitarian kitchen wares, i.e., those forms used for the storage and/or preparation of food (Plate 13). Of the 134 vessels identified as being related to food storage/preparation (27.2% of the East Block vessels), 129 are redwares, including all of the milk pans. The 23 milk pans represented in the East Block assemblages indicate a certain level of economic independence during the course of the nineteenth century; the agricultural census data from 1850, 1860, and 1870 show that the Locust Grove farm was producing, on average, about 320 pounds of butter per year, probably for household consumption and for sale to local merchants. Non-redware kitchen forms include two gray salt-glazed storage vessels (Feature 4), an embossed yellowware bowl (Feature 4), a plain yellowware pie plate (SU A), and a refined

red earthenware food preparation/serving vessel (Feature 4). Redware food preparation/serving vessels from the East Block include a number of shallow slip-decorated forms, often referred to as "pie plates," that served as baking and serving dishes; several shallow hollowware pans (Plate 14), used for puddings, cakes, or casserole-type dishes, were also represented in the East Block assemblages. The tablewares recovered from the East Block are quite varied, as shown in Appendix D, and include creamware (Plate 15), pearlware, ironstone, porcelain, and yellowware. Yet, based on their occurrence in nearly every deposit, and the fact that they make up over 16 percent (N=81) of all identifiable vessels, blue shell edge whiteware plates (Plate 16) appear to have been the everyday tablewares for much of the period represented by the East Block assemblages. These wares continued to be produced with some variation throughout the period from 1815 to 1890, and several sets appear to be represented in the East Block. These would include plates ranging in size from 6 to 10 inches as well as larger serving pieces such as platters or chargers. Several blue shell edge pearlware pieces are also present in the assemblages, as are a number of green shell edge whitewares and pearlwares. Shell edge table settings may have been accompanied by serving bowls, pitchers, and other pieces decorated with simple bands or more elaborate mocha or handpainted styles (Plate 17).

PLATE 13: Redware Wide-Mouth Jar (Feature 2)

Teawares that were probably used on an everyday basis are represented in the East Block assemblages by vessels in a variety of decorative styles, with polychrome handpainted cups and saucers (in pearlware and whiteware) being the most common at Locust Grove. A minimum of 24 polychrome handpainted cups in whiteware are represented in the East Block (including seven in SU E and five in Feature 4), together with at least six in pearlware. Fifteen whiteware polychrome handpainted saucers (a third of which were present in SU E) were recovered from the East Block. Other decorative varieties of everyday teawares include dipped, banded, and sponged (Plates 18 and 19), with the latter being the most common after the polychrome handpainted forms. A minimum of seven whiteware cups, nine saucers, and four miscellaneous teaware forms with sponged decoration were recovered from the East Block excavations. Four sponged teawares in pearlware, including a cup, two saucer/bowl forms, and a miscellaneous piece, were also present. Because of the highly fragmented condition of the teaware vessels from Locust Grove, it has not always been possible to identify their precise forms; most of the teacups from the East Block, for example, are classified simply as cups (see Appendix D). The more

PLATE 14: Redware Pan with Clear Glaze and Brown Decoration (SU B1)

complete pieces, such as the cups shown in Plate 18, appear to be "London Shape," the most common cup shape for the period 1810-1840 (Miller 1991); except for a polychrome handpainted teacup from SU B1, most do not appear to have had handles, a feature uncommon on cups until the second half of the nineteenth century (Miller 1991).

More formal occasions, such as Sunday dinners, perhaps, or meals shared with guests, were probably accompanied by more expensive transfer-printed tablewares, teawares, and serving pieces. Sixty-two of the East Block vessels are transfer-printed forms, including nine pearlware, 52 whiteware, and one ironstone. Most (48) are blue transfer-printed; two vessels, one with brown and one with black transfer-printed decoration, were recovered, along with two vessels with transfer-print flowing color motifs. Teawares and tablewares with transfer-printed decoration are represented by identical numbers of vessels. Teawares include a flowing-color ironstone teapot, 11 saucers/bowls, 15 cups (including one double-curved), and five miscellaneous forms. Transfer-printed tablewares from the East Block include 15 plates, five flatwares (chargers and platters), two serving bowls, and nine miscellaneous pieces. At least eight different blue transfer-print patterns are represented in the East Block assemblages, and all were produced in Britain at various times during the period from the 1820s to the 1860s (Table 13); three of these patterns are illustrated in Figure 24 and Plates 20 and 21. By the 1850s, transfer-printed wares had declined in popularity and were replaced by white granite wares, which remained

PLATE 15: Royal Pattern Creamware Plate (Feature 4)

PLATE 16: Shell Edge Plate Rims
Top: "Chicken Foot" Motif (Feature 4)
Center: Inpressed and Unscalloped Rim (SU E)
Bottom: Dish or Platter with Floral Molding and Impressed Rim (SU B1)

dominant until the end of the nineteenth century (Miller 1991). Since most of the transfer-printed vessels in the East Block assemblages were highly fragmented, it is not possible to determine if they were purchased as sets or as individual pieces on an ad hoc basis. Given the economic status of the households that occupied the property during the nineteenth century, the former would seem more likely, but cannot be assumed *a priori*.

Tea and tablewares in plain whiteware were also recovered from deposits in the East Block (see Appendix D), and together account for just over seven percent (N=37) of the reconstructed vessels. These may represent vessels purchased in the second half of the nineteenth century as replacements for earlier shell edge or transfer-printed forms. Unfortunately, the fact that the ceramic wares from several households may be represented in any one of the East Block deposits precludes any definitive statement concerning changes in ceramic usage over time at Locust Grove. The majority of the plain whiteware vessels are tablewares, most of which were recovered from landscaping deposits, including 18 plates, six flatware, five miscellaneous tableware forms, and one bowl. The seven plain whiteware teawares include a London Shape

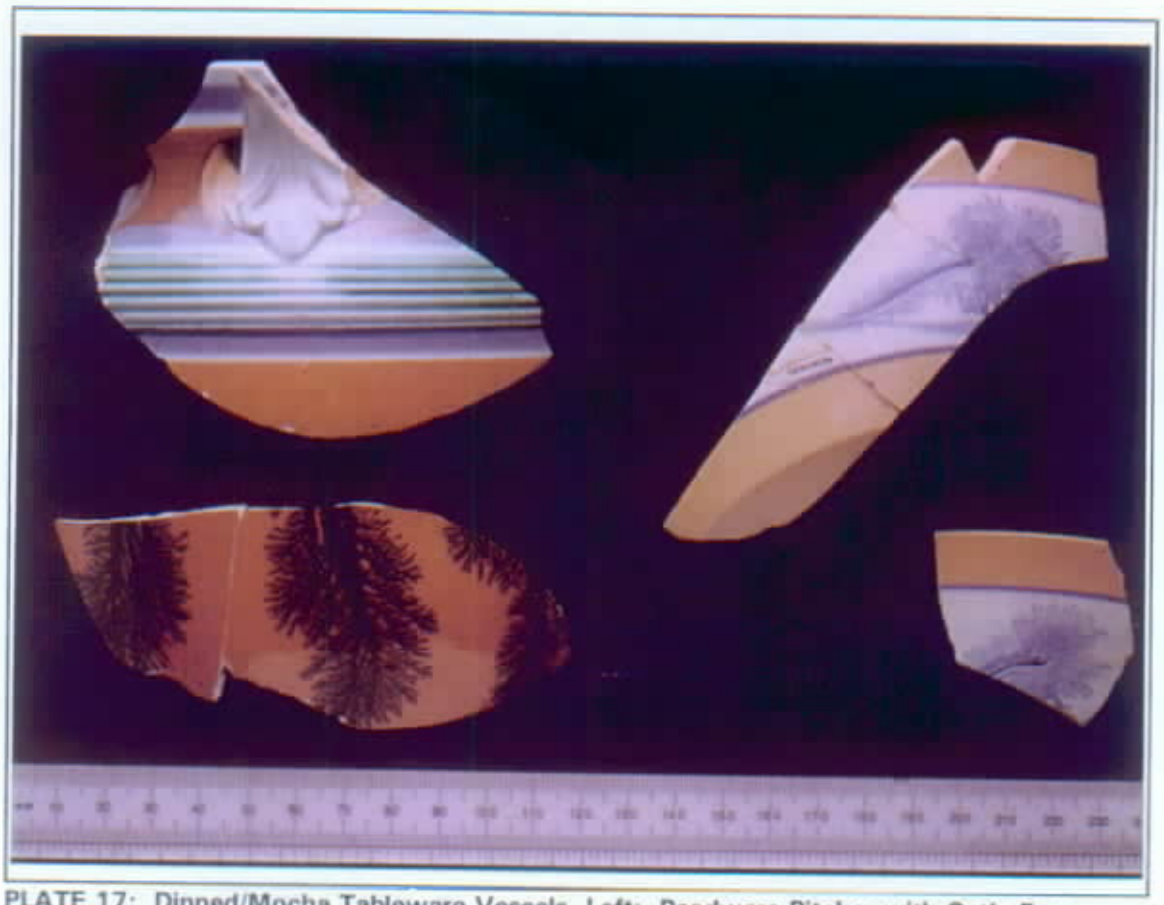


PLATE 17: Dipped/Mocha Tableware Vessels. Left: Pearlware Pitcher with Cat's Eyes, Incised, and Dendritic Motifs (SU B2) Right: Yellowware London Shape Bowl with Blue Seaweed Decoration (SU E)

cup, three handleless cups, two miscellaneous teacups, and a saucer/bowl. One miscellaneous tableware, two handleless cups, and a miscellaneous teacup in plain panelled whiteware were also recovered. Three chamberpots in plain whiteware are also represented. The balance of the East Block ceramic vessels include teawares and/or tablewares in porcelain, plain creamware (including the Royal Pattern plate shown in Plate 15), and ironstone (plain and embossed). These vessels all represent relatively minor percentages of the East Block assemblages.

A total of 186 minimum glass vessels were recovered from Site 7NC-F-73, 128 from deposits in the East Block (Table 14) and 58 from the West Block (Table 15). For both blocks, themajority of the reconstructed glass vessels (128, or 68.8%) are unidentifiable as to specific function, mainly due to the overall lack of vessel completeness, which strongly suggests that containers and whole and broken glassware were deposited elsewhere on the site. Indeed, only one intact bottle was recovered from the site. This bottle, collected from SU C 1, had once contained "Radway's Ready Relief," a painkiller produced in New York as early as 1848; the bottle recovered from SU C1 was mold blown and postdates 1877 (Fike 1987:74). Among the identifiable vessels, beverage bottles are poorly represented at Locust Grove (2.2% of the glass MNVs); only one miscellaneous bottle was collected from SU B1 in the East Block, while SU A and Feature 5 in the West Block yielded the only identifiable wine/liquor bottles recovered

PLATE 18: Sponged Whiteware London Shape Tea Cups. Left: Yellow and Blue Decoration (Feature 4) Right: Blue Decoration (Feature 4)

TABLE 13

TRANSFER-PRINT PATTERNS
EAST BLOCK, LOCUST GROVE SITE (7NC-F-73)

PATTERN	MANUFACTURER	DATES OF PRODUCTION
Napier	John & George Alcock	1839-1846
Nankin	Thomas Dimmock	1828-1859
Canova		1826-1848
Delphi	William Adams & Son	1825-1864
Texian Campaigne	James Beech (?)	1846-1860
Ruins	William Adams & Co.	1825-1864
Columbus	William Adams & Son	1825-1864
York Minster	Henshall & Co.	1820s

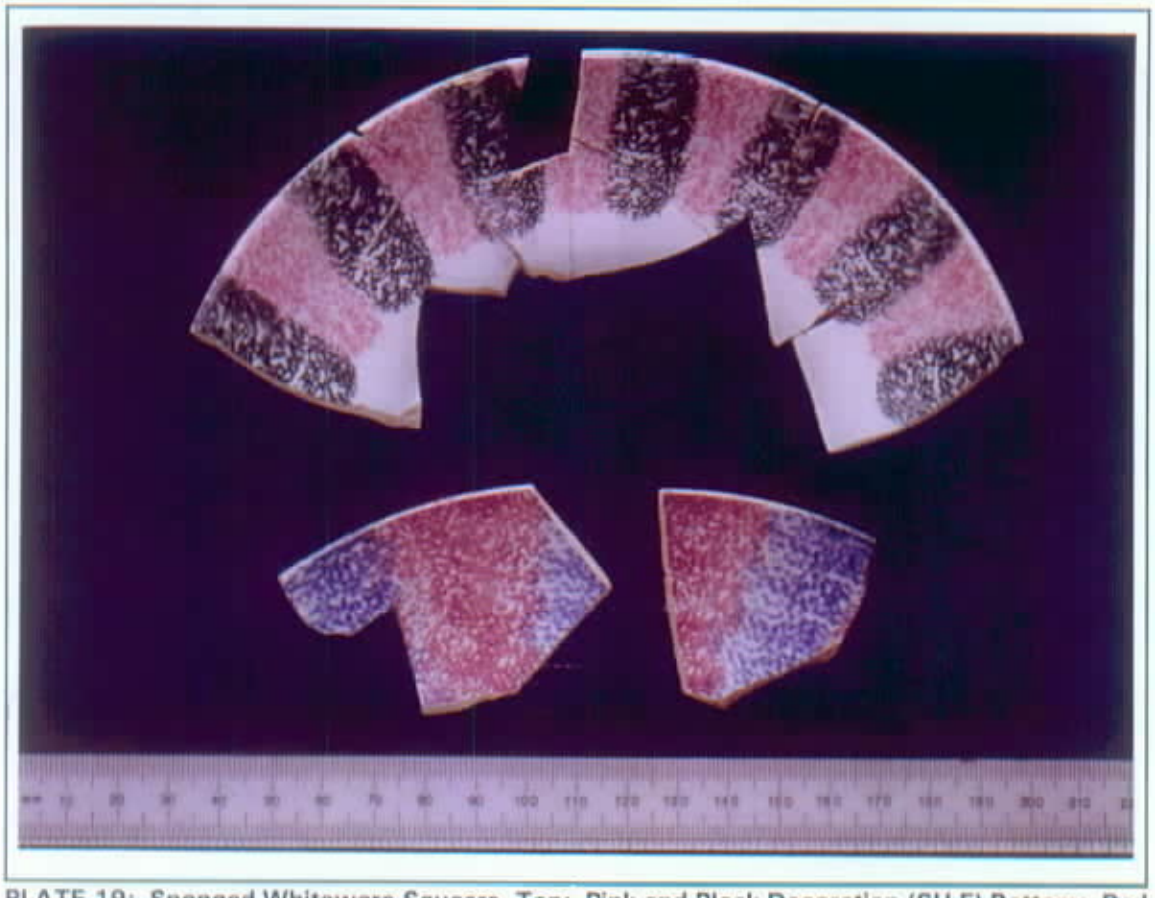


PLATE 19: Sponged Whiteware Saucers. Top: Pink and Black Decoration (SU E) Bottom: Red and Blue Decoration (SU E)

from Locust Grove. Eleven pharmaceutical bottles (5.9% of the glass MNVs), including mold-blown drugstore and patent/proprietary bottles (Plate 22) and hand-blown medicinal vials (Plate 23), were collected from the site, all from the East Block. The majority of these (N=7), including all but one of the vials, were recovered from two deposits, SU E and Feature 4 (see Table 14). In addition to the Radway's bottle noted above, only one other patent/proprietary medicine bottle with a legible embossment was recovered–a "Turlington's Balsam" bottle (see Plate 22) produced sometime after 1768. Turlington's Balsam, a cure-all of English origin, was patented in 1744, and was available in North America by the 1760s; it continued in production until the 1930s.

Drinking vessels, including tumblers (26 total) (Plate 24) and stemware (three total), were recovered from deposits in both blocks, and account for 15.6 percent of the Locust Grove glass MNVs. The tumblers, which were probably used on an everyday basis, were fairly evenly distributed among the various depositional contexts in the East Block; in the West Block, the six tumblers are evenly distributed between SU A and Feature 5. Of the three stemware vessels, two were recovered from landscaping deposits (SU A in the East and West Blocks), while the third was collected from Feature 5.

PLATE 20: Blue Transfer Printed Whiteware Dish; *Columbus* Pattern by William Adams and Company (SU E)

PLATE 21: Blue Transfer Printed Whiteware Saucer; *Ruins* Pattern by William Adams and Company (SU E)

Unidentifiable tableware vessels, which would include forms such as bowls or cake plates, account for 5.9 percent of the glass MNVs (N=11). Like the tumblers, tableware vessels recovered from the East Block were distributed more or less evenly among the major depositional contexts (see Table 14). In the West Block, tableware vessels were recovered from SU A and Feature 5 (see Table 15).

Lighting Glass, which falls under the Furnishings Group, represents 1.6 percent of the Locust Grove glass MNVs (N=3). All three are oil lamp globes or chimneys, and all were recovered from the West Block. One example was collected from SU A (landscaping deposit), and two from Feature 5 (see Table 15).

Other kitchen items recovered from Locust Grove include utensils (all recovered from the East Block) and crown caps. Among the former are two ferrous metal spoon or fork handle fragments collected from SU C1, three handle fragments with copper pins recovered from SU E, and a wood and ferrous metal knife or small cleaver handle from SU C1.

FIGURE 24: Blue Transfer-Printed Whiteware Plate in the "Delphi" Pattern by W. Adams & Son, Tunstall and Stoke, Staffordshire, England

3. Architectural Artifacts

A total of 3,353 architectural-related artifacts (not including brick and other building material) were recovered during all three phases of investigation at Locust Grove, accounting for 22.8 percent of the functionally identifiable assemblage (see Table 8). The majority of the site-wide architectural assemblage consists of nails (2,063, or 61.5% of the Architecture Group), most of (N=564) that were produced throughout the nineteenth century. Handwrought nails (N=276)

TABLE 14

SUMMARY OF GLASS MINIMUM NUMBER OF VESSELS
FUNCTIONAL CATEGORIES BY STRATIGRAPHIC UNIT AND FEATURE
EAST BLOCK
LOCUST GROVE SITE (7NC-F-73)

FUNCTIONAL CATEGORY	STRATIGRAPHIC UNIT						FEATURE[1]			TOTAL MNVs
	A	B1	B2	C1	C2	E	4	10	12	
BOTTLE GLASS										
Beverage										
Wines/Liquors	.	.	.	.	.	.	.	.	.	.
Miscellaneous	.	1	.	.	.	.	.	.	.	1
Pharmaceutical										
Drugstore	.	.	.	.	.	1	.	.	.	1
Patent/Proprietary Medicines	1	.	.	2	.	.	.	.	.	3
Vials	1	.	.	.	.	3	3	.	.	7
Unidentified										
Bottles/Containers	11	14	5	9	4	7	17	3	5	75
Bottle-Associated	6	.	.	.	.	.	.	.	.	6
TABLE GLASS										
Drinking Vessels										
Tumblers	3	3	1	3	.	3	5	1	1	20
Stemwares	1	.	.	.	.	.	.	.	.	1
Unidentified										
Tablewares	2	1	.	1	.	1	1	.	.	6
Table-Associated	.	.	.	.	.	.	.	.	.	.
LIGHTING GLASS										
Lamp Parts	.	.	.	.	.	.	.	.	.	.
OTHER GLASS										
Totally Unidentified	1	2	2	.	.	2	1	.	.	8
TOTAL MNVs	26	21	8	15	4	17	27	4	6	128

[1] No glass was associated with Features 2, 7, 8, and 9

make up just over a quarter of the identifiable nails, while wire nails (N=181), patented in the which are unidentifiable. Of the nails that could be identified, over half are machine cut nails mid-nineteenth century, account for just under 18 percent. Most of the wire nails recovered from the site were collected from excavation contexts to the rear of the house and are probably associated with the construction of the twentieth-century additions to the dwelling, the pool house, and other recent structures. Only 10 were retrieved from the block excavations (all in the East Block), eight of which were collected from SU A.

TABLE 15

SUMMARY OF GLASS MINIMUM NUMBER OF VESSELS
FUNCTIONAL CATEGORIES BY STRATIGRAPHIC UNIT AND FEATURE, WEST BLOCK
LOCUST GROVE SITE (7NC-F-73)

FUNCTIONAL CATEGORY	STRATIGRAPHIC UNIT		FEATURE	TOTAL MNVs
	A	B	5	
BOTTLE GLASS				
Beverage				
Wines/Liquors	2	.	1	3
Miscellaneous	.	.	.	.
Pharmaceutical				
Drugstore	.	.	.	.
Patent/Proprietary Medicines	.	.	.	.
Vials	.	.	.	.
Unidentified				
Bottles/Containers	13	5	10	28
Bottle-Associated	.	.	.	.
TABLE GLASS				
Drinking Vessels	.	.	.	.
Tumblers	3	.	3	6
Stemwares	1	.	1	2
Unidentified				
Tablewares	3	.	.	3
Table-Associated	.	.	2	2
LIGHTING GLASS				
Lamp Parts	1	.	2	3
OTHER GLASS				
Totally Unidentified	2	7	2	11
TOTAL MNVs	25	12	21	58

Window glass constitutes the second largest category within the Architecture Group, accounting for 1,265 (37.7%) of the non-brick architectural items recovered from the site. The overwhelming majority of the window glass fragments are broad glass (994, or 78.5% of all window glass), produced between about 1820 and 1926, which were found scattered across the site during all three phases of fieldwork. Crown glass, produced throughout the eighteenth and early nineteenth centuries (terminal date=ca.1840), forms a minor percentage of the window glass recovered from the site (88, or 6.9%). However, most of the crown glass fragments from Locust Grove were collected from the front and west side yards, 62 of the 88 fragments having been recovered from the East (N=56) and West (N=6) blocks. The two highest concentrations of crown glass were encountered in the East Block in SU A (N=12) and in Feature 4 (N=16). Just under 15 percent of the window glass from the site falls into the "other" category, and consists mainly of modern (i.e., twentieth-century) types.

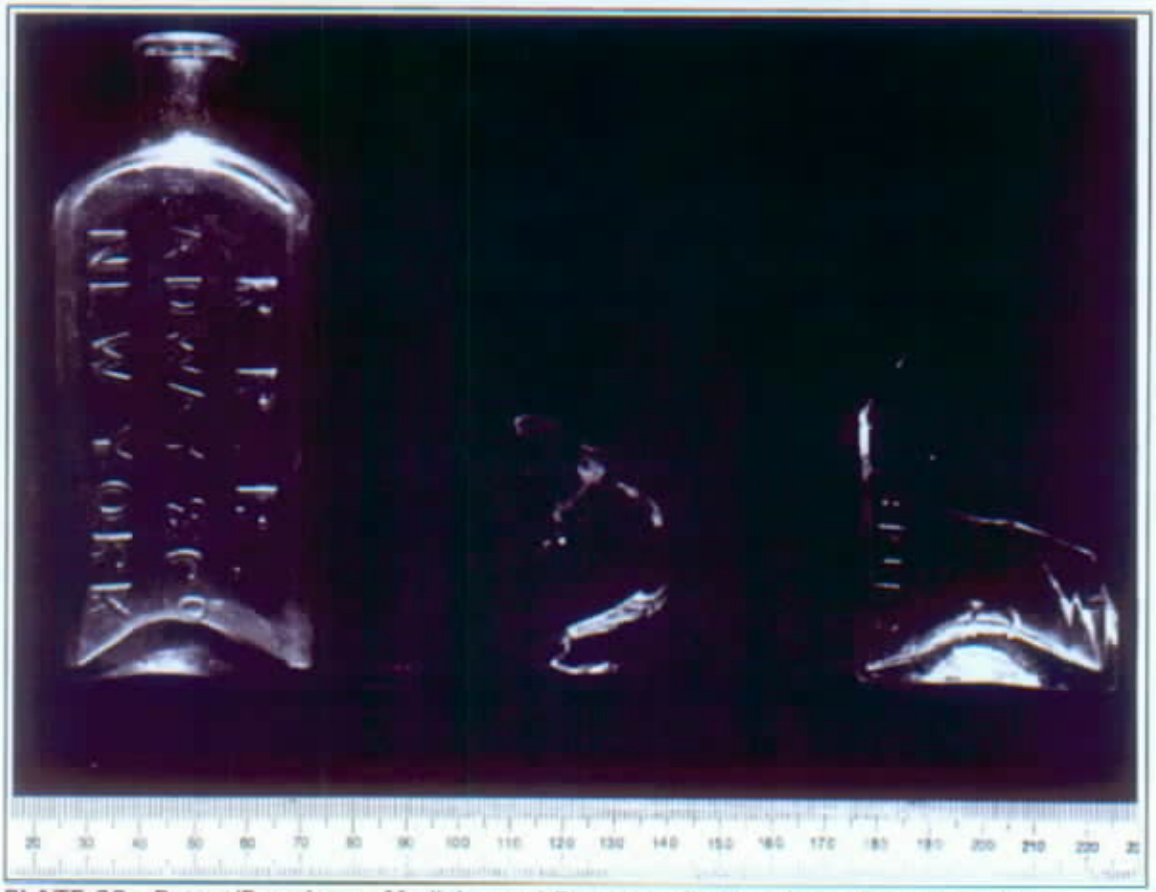


PLATE 22: Patent/Proprietary Medicine and Drugstore Bottles. Left: Patent Medicine Bottle Embossed "R.R.R./RADWAY & C°/NEW YORK/ENT^{D}. ACOR^{D}.TO/ACT. OF. CONGRESS" (SU C1) Center: Patent Medicine Bottle Embossed "TURLI[NG]/TON[S]/BALSA[M]" (SU C1) Right: Drugstore Bottle Embossed "SIME . . ./CH[EMI]STS/P . . . " (SU E)

The balance of the Architecture Group consists of hardware (strap hinges, door parts, etc.), tacks and staples, a lead spigot (from SU E), and plumbing/electrical hardware.

4. Furnishings Artifacts

Furnishings-related artifacts make up less than 0.2 percent of the functionally identifiable items recovered from the site. As already noted in the discussion of the glass vessels from Locust Grove, portions of three lamp globes or chimneys were recovered during the investigations. Altogether, a total of 15 fragments of lamp glass were collected, along with four brass pieces, including base fragments and an intact handle ring, of a probable whale oil lamp recovered from landscaping deposits (SU B1) in the East Block. Other furnishings include a glass and metal drawer pull from Feature 5; an iron leg, possibly from a chest or sewing machine cabinet, recovered from Feature 4; fragments of mirror glass; a castor; an ash shovel from SU C1; part of a fireplace poker from SU B2; and a decorative bracket recovered from Phase II Test Unit 16.

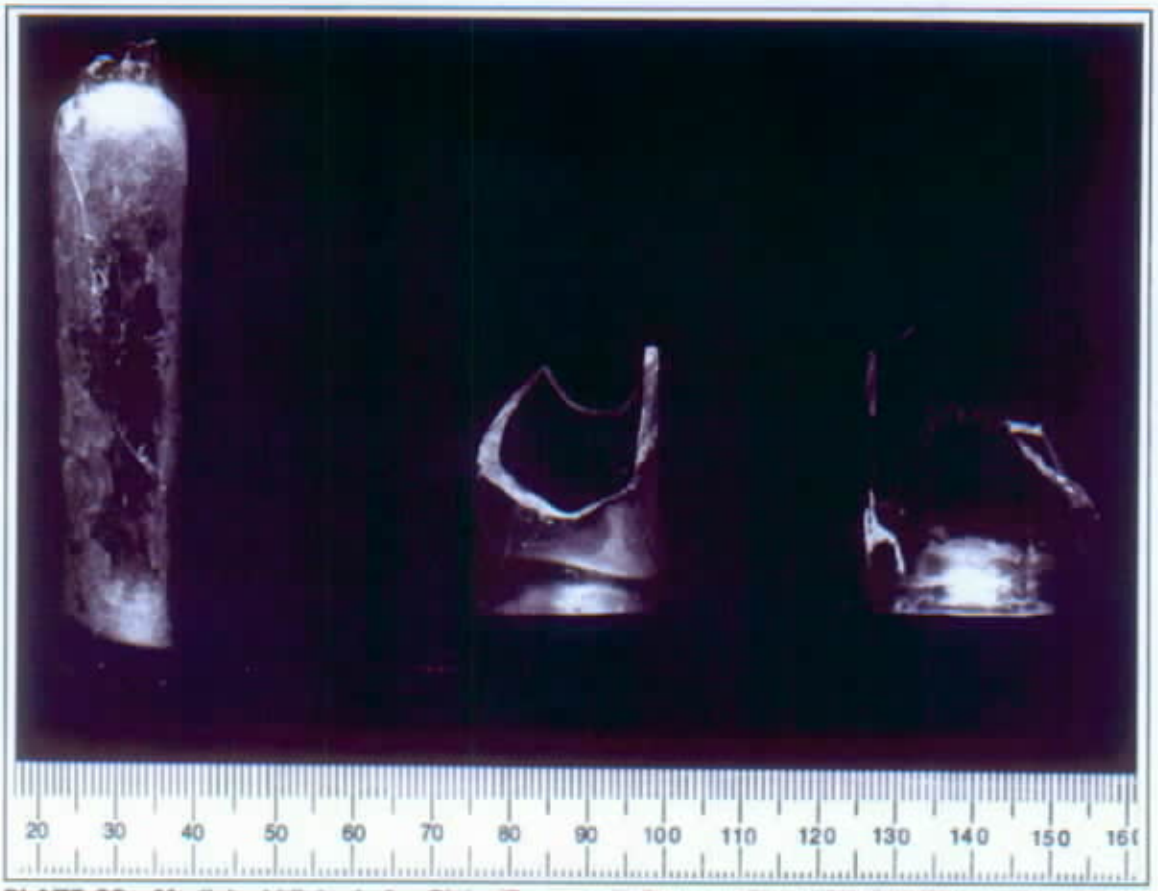


PLATE 23: Medicinal Vials. Left: Plain (Feature 4) Center: Plain (SU C1) Right: Panelled (SU B2)

5. Arms

The arms-related items from Locust Grove constitute only 0.06 percent of the Locust Grove assemblage. Of these, three are 12-gauge shotgun shells, four are .22-caliber rimfire bullet casings, and one is a .32-.40 shell casing. The ninth arms-related artifact is a gunflint fragment of European flint recovered from SU C1 in the East Block.

6. Clothing Artifacts

The 31 clothing-related artifacts from Site 7NC-F-73 (0.21% of the assemblage) consist primarily of fasteners, including buttons, snaps, and a hook. The buttons include a domed brass button, a brass button disk, four gilt brass one-piece buttons (including one from SU B2 and one from SU E) (ca. 1800-1850) (Plate 25), two ungilded brass one-piece buttons (one from SU B1), three plastic buttons, a bone button (see Plate 25), two small plain china buttons (beginning date of manufacture, ca. 1850), a pressed-glass button (Feature 5) (see Plate 25), a white metal button disk with evidence of a ferrous metal shank, and three brass tombac buttons (one from Feature 4; see Plate 25), with a terminal date of manufacture about 1800. Tombac was an alloy that combined brass with white copper and arsenic, creating an easily polished surface resembling

PLATE 24: Tumblers. Left: Undecorated (Feature 4) Center: Faceted (SU C1) Right: Faceted (SU E)

silver. Tombac buttons are also denoted by their manufacturing style; a wire shank with a raised extension for reinforcement and a lathe-smoothed disk are characteristic (see Plate 25).

Other fasteners include ferrous metal buckles, a clothing hook, and several snaps. Three shoe parts were also recovered, including a shoelace and two possible heel fragments, the latter collected from SU C2. The three sewing-related items include a brass straight pin (SU A in the East Block), a brass thimble, and a stainless steel needle cover (SU A in the West Block).

7. *Personal Artifacts*

The 75 personal items recovered during the three phases of study at Locust Grove represent 0.51 percent of the functionally identifiable artifacts. The majority (53; 70.6% of the Personal Group) consists of fragments of pharmaceutical vials and patent/proprietary medicine bottles discussed earlier in relation to the glass vessels from the site. The balance of the personal items include five coins, all recovered from topsoil/landscaping fill, consisting of three U.S. pennies (1901,

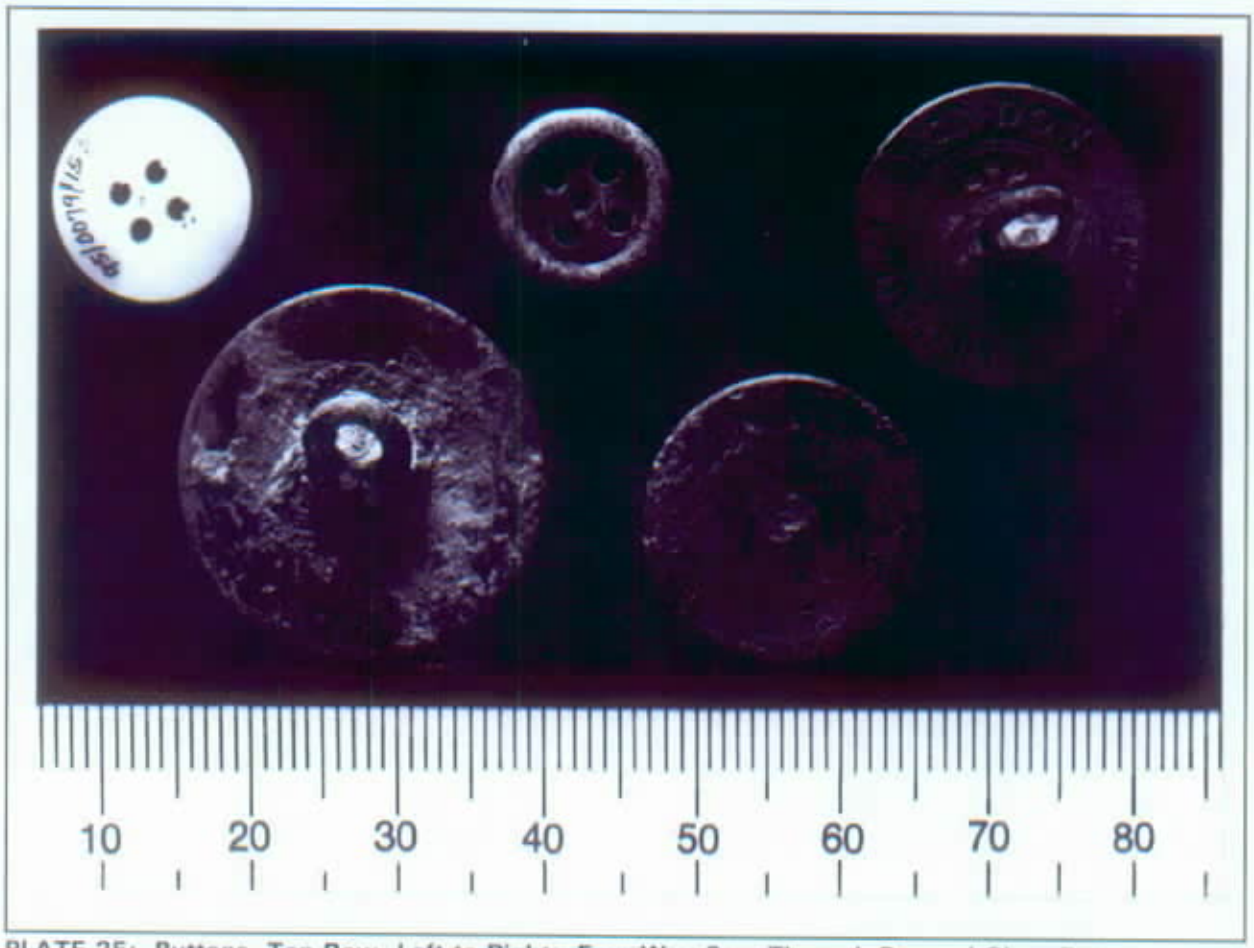


PLATE 25: Buttons. Top Row, Left to Right: Four-Way Sew-Through Pressed-Glass Button (Feature 5); Five-Way Sew-Through Bone Button (SU C1); Gilt1-Piece Brass Button (SU B2) Bottom Row, Left to Right: 1-Piece Tombac Button with Cone Shank (Feature 4); Gilt1-Piece Brass Button with Missing Shank (SU E)

1947, and 1968), a U.S. nickel (1898), and a U.S. dime (1965); plastic comb fragments; a plastic toothbrush; parts of two plastic and metal pocket knives; and the internal gear plate from a pocket watch or stopwatch. Jewelry items include a glass bead (SU B1), a brass one-piece bracelet (SU A, East Block), and a paste (glass) jewelry stone (SU C2). Miscellaneous personal artifacts include several ferrous metal skeleton keys, and a brass name plate stamped "C.T. Carpenter."

8. Tobacco Pipes

A total of 14 tobacco pipe fragments were recovered from Site 7NC-F-73, accounting for 0.09 percent of the functionally identifiable assemblage. Of these, 13 are white clay pipe stem or bowl fragments, nine of which were collected from landscaping deposits in the East Block. The fourteenth is a stem and bowl fragment from a red stoneware "Shaker pipe," recovered from

Shovel Test Pit 1 near the southeastern corner of the house. Shaker pipes, according to Sudbury (1986), are characterized by stems at a right angle to the bowl; the stem in this case was simply a short extension of the bowl and was designed to be fitted with a reed stem. Shaker pipes are dated to the period 1850 to 1940.

The white clay tobacco pipe fragments include nine bowl and four stem pieces. All but two of the bowl fragments are decorated with raised, curved flutes, and date from circa 1825-1875. One of the remaining bowl fragments, collected from Stratum A in Test Unit 44, is also fluted, but also has a linear vine motif along both the front and back mold seams. The ninth bowl fragment, recovered from STP 5, is undecorated, as are the stem pieces.

PLATE 26: Piney Island Point (Test Unit 48, Stratum A)

9. Activities Artifacts

The Activities Group at Locust Grove is represented by 783 artifacts (5.3% of the identifiable artifacts); the overwhelming majority of these items consist of unglazed redware flowerpot fragments (599; 76.6% of this group), noted earlier in the discussion of ceramic vessels. Of the remaining artifacts, the bulk (N=145) consist of assorted hardware items such as nuts, bolts, washers, S-hooks, and the like. Farm-related artifacts consist of barbed wire fragments, while livestock-related artifacts include two horseshoes and an iron stirrup (from SU C1). Tools recovered from the site include the head from a small claw hammer, the plastic handle of a screwdriver, a ferrous metal pritchel or punch, and miscellaneous tool parts. The remainder of the activities-related items include two slate pencils, clothespin springs, battery parts, a lead fishing weight, and toys. The latter consist of four marbles (one clay, two machine-made glass, and one stone [marble]), two plastic wheels, a porcelain doll fragment, and part of a sponge rubber ball.

10. Prehistoric Artifacts

As noted previously, 10 prehistoric artifacts were recovered during the Phase III excavations. Of these, only one is temporally diagnostic–a quartz Piney Island point recovered from the topsoil in Test Unit 48 (Plate 26). These narrow-bladed points are attributable to the Archaic-Woodland I periods, most likely dating between 3000 BC and AD 500 (Custer 1996). A chert uniface fragment was present in SU A in Test Unit 29. The remainder of the prehistoric assemblage

includes three pieces of debitage–a quartz flake fragment from SU B2; a jasper decortication flake collected from a rodent-disturbed area in Test Units 22 and 22; and a piece of quartz block shatter recovered from the subsoil in Test Unit 49. Also collected were three pieces of cracked rock, two of which were recovered from SU A in Test Unit 24, while the third was found in Feature 4. Two pieces of mica round out the prehistoric assemblage; one was collected from landscaping deposits in Test Unit 42, and the other from SU B1 in Test Unit 55. Except for the piece of block shatter recovered from the upper 10 cm of the subsoil in Test Unit 49, all of the prehistoric artifacts from Locust Grove were found in historic or otherwise disturbed deposits.

C. FAUNAL REMAINS

As shown in Table 16, a total of 530 bone and teeth fragments were recovered from Locust Grove. Due to the highly fragmented condition of most of this material, only 129 of these elements could be identified by species. Pig is the most highly represented, with 17.74 percent of the total number of elements, followed by cow (5.09%), sheep/goat (0.75%), and chicken (0.75%). Of the unidentified elements, 190 (35.85%) are classified as medium mammal (which could represent pig or sheep/goat), and 171 are unidentified mammal (32.26%). Neither fish nor any other wild taxa, such as deer or goose, were identified in the Locust Grove faunal assemblage.

Despite the limitations of the faunal assemblage, some tentative conclusions can be drawn concerning the foodways of the Locust Grove inhabitants. Tables 17 and 18 summarize the pig and cow remains recovered from the two block excavations. Of the 43 pig elements recovered, 37 are teeth or jaw fragments (17 of which were concentrated in SU E), while the remainder include two metacarpal/tarsal fragments, an astragalus, one tibia fragment, and two humerus fragments, one of which shows evidence of having been cut. The majority of these remains represent butchering refuse, i.e., the teeth and jaw fragments as well as the foot elements (the metacarpal/tarsal and astragalus). The tibia and humerus fragments, on the other hand, are most likely food waste, possibly from hams (picnic ham in the case of the tibia, and shank portion in the case of the humeri). The cut mark on the humerus fragment recovered from SU A (East Block) was probably produced during removal of the meat after cooking.

The 17 diagnostic cow teeth and bone fragments from the block excavations, over half of which are from SU C1, are more evenly split between probable butchering waste and food remains. The four teeth, the mandible fragment, the phalanges, metatarsal, and metacarpal/tarsal were probably discarded after butchering, although none display butcher marks. The scapula, ribs, humerus, tibia, femur, and radii were most likely food remains. Cut marks were found on only two of these elements–the rib fragment and radius recovered from SU A (West Block); the tibia from SU C1 had been sawed. Beef cuts represented by the butchered elements include ribs, foreshank, and hindshank. The elements present also suggest the consumption of meat cuts such as shoulder (or chuck) and round.

Three of the four sheep/goat elements recovered during the investigations were collected from the East Block, all from SU B1. The two identifiable fragments are cranial elements and

TABLE 16

SUMMARY OF FAUNAL REMAINS,* LOCUST GROVE SITE (7NC-F-73)

SPECIES	NO. OF BONE AND TOOTH FRAGMENTS	PERCENTAGE OF TOTAL
Pig	94	17.7
Cow	27	5.1
Sheep/Goat	4	0.7
Small Mammal	4	0.7
Medium Mammal	190	35.9
Large Mammal	23	4.3
Unidentified Mammal	171	32.3
Chicken	4	0.7
Unidentified Bird	11	2.1
Unidentified Bone	2	0.4
TOTAL	530	100.0

* Does not include shell

probably represent butchering waste. The sole chicken element recovered from SU E in the East Block is a fragment of a tibiotarsus (lower leg/foot).

By far the most frequently represented category of faunal remains at Site 7NC-F-73 is oyster shell. A total of 874 whole shells and/or valves were recovered during the various phases of investigation. Although only whole shells and valves were counted, all shell from the site was weighed, yielding 35.663 kilograms of oyster shell, 0.685 kilograms of clam shell (including six whole shells/valves), and 0.262 kilograms of hard shell clam.

All but 1.5 kilograms of oyster shell was recovered from the two block excavations; the shell weights from the East and West Blocks are summarized in Table 19. Over half of the 34.163 kilograms of oyster shell recovered from the block excavations was collected from the landscaping deposits (SU A and B) in the West Block, while a relatively insignificant amount was present in Feature 5. No clam shell was collected from the West Block (see Table 19). Nearly 15 kilograms of oyster shell were recovered from the East Block, and oyster shell was present in every depositional context. The densest concentration in the East Block was present in Feature 10, which yielded over three kilograms of shell. A similar amount was recovered from the rather larger Feature 4.

D. FLORAL ANALYSIS

Fourteen flotation samples were submitted to the Ethnobotany Laboratory at the State Historical Society of Wisconsin for processing and floral analysis. The analysis of the archaeobotanical assemblage from Locust Grove was aimed at identifying subsistence activities and feature

TABLE 17

DIAGNOSTIC PIG REMAINS, BLOCK EXCAVATIONS, LOCUST GROVE SITE (7NC-F-73)

STRATIGRAPHIC UNIT/FEATURE	EAST BLOCK							WEST BLOCK		
	A	B1	C1	C2	E	4	10	A	5	TOTAL
ELEMENT										
Molar	1	.	4	.	8	2	2	.	1	12
Premolar	.	1	.	.	.	.	.	.	.	1
Canine	1	.	.	.	3	5	.	.	.	9
Incisor	.	.	.	.	6	.	.	.	.	6
Tusk	.	.	2	.	2	.	.	.	.	4
Mandible	.	.	.	.	4	.	.	.	.	4
Maxilla	.	.	1	.	.	.	.	.	.	1
Humerus	1*	.	.	.	.	.	.	1	.	2
Tibia	.	.	.	.	.	1	.	.	.	1
Astragalus	.	.	.	.	.	1	.	.	.	1
Metacarpal/Tarsal	1	.	.	1	.	.	.	.	.	2
TOTAL	4	1	7	1	17	9	2	1	1	43

*Cut

TABLE 18

DIAGNOSTIC COW REMAINS, BLOCK EXCAVATIONS, LOCUST GROVE SITE (7NC-F-73)

STRATIGRAPHIC UNIT/FEATURE	EAST BLOCK				WEST BLOCK	
	A	C1	E	4	A	TOTAL
ELEMENT						
Molar	1	1	.	.	.	2
Incisor	.	1	1	.	.	2
Mandible	.	1	.	.	.	1
Scapula	.	.	.	1	.	1
Rib	1	1	.	.	1**	3
Humerus	.	1	.	.	.	1
Tibia	.	1*	.	.	.	1
Femur	.	1	.	.	.	1
Radius	.	.	.	.	1**	1
Phalange	.	1	1	.	.	2
Metatarsal	.	.	1	.	.	1
Metacarpal/Tarsal	.	1	.	.	.	1
TOTAL	2	9	3	1	2	17

*Sawed **Cut Marks

TABLE 19

SHELL WEIGHTS FROM EAST AND WEST BLOCKS, LOCUST GROVE SITE (7NC-F-73)

PROVENIENCE	OYSTER SHELL (kg)	CLAM SHELL (kg)
EAST BLOCK		
Stratigraphic Unit A	0.999	.
Stratigraphic Unit B1	1.142	0.06
Stratigraphic Unit B2	0.530	.
Stratigraphic Unit C1	1.528	0.09
Stratigraphic Unit C2	0.350	.
Stratigraphic Unit E	2.570	0.29
Feature 2	0.200	.
Feature 4	3.317	0.09
Feature 7	0.010	.
Feature 8	0.075	.
Feature 9	0.200	.
Feature 10	3.231	0.04
Feature 12	1.070	0.08
WEST BLOCK		
Stratigraphic Unit A	9.519	.
Stratigraphic Unit B	9.160	.
Feature 5	0.240	.

function, as well as reconstructing the prehistoric and nineteenth-century environments. Unfortunately, the flotation-recovered archaeobotanical assemblage was insubstantial. As a result, the assemblage provides limited information regarding environment and subsistence activities during the prehistoric and historic occupations. The analytical methods and the results of analysis are presented in detail in Appendix G.

The 14 samples (approximately 22.7 liters) were collected from Features 4, 5, 7 and 9, and from Strata B, C, E, and F (SUs B1, C1, E, and F) of the East Block. These samples were recovered from refuse pits, a prehistoric pit house/treefall, and sheet midden/landscaping contexts. The archaeobotanical assemblage from the site includes wood charcoal, nutshell, and fruit and weed seeds.

A single control sample was collected from Stratum F, the subsoil beneath Feature 9. This sample contained wood charcoal and modern weed seeds (Table 20). The wood charcoal could not be identified to taxon, and its presence in a sterile subsoil context suggests bioturbative disturbance. The 12 seeds in the sample were uncarbonized and modern and include amaranth (*Amaranthus* sp.), goosegrass (*Eleusine* sp.), pokeweed (*Phytolacca americana*), and purslane (*Portulacca* sp.) (see Table 20). It is likely that these specimens are contaminants introduced during the collection and processing of the flotation sample.

TABLE 20

IDENTIFIED FLORA FROM FLOTATION SAMPLES, LOCUST GROVE SITE (7NC-F-73)

SPECIES	FLOTATION SAMPLES							
	FEATURE				STRATUM			
	4	5	7	9	B	C	E	F
Maple (*Acer*)	X	.	.	.	.	.	.	.
Hickory (*Carya*)	X	.	.	X	.	.	.	.
American Chestnut (*Castenea*)	.	.	X	.	.	.	.	.
Ash (*Fraxinus*)	X	.	.	X	.	X	.	.
Oak (*Quercus*)	X	.	.	X	.	X	X	.
Deciduous-ring porous	X	.	X	X	X	X	X	.
Deciduous-diffuse porous	.	.	.	.	.	.	X	.
Coniferous	X	.	.	.	.	.	.	.
Chokeberry (*Aronia sp.*)	X	.	.	.	.	.	.	.
Blackberry (*Rubus sp.*)	.	X	.	.	.	.	X	.
Nannyberry (*Viburnum sp.*)	.	.	.	.	X	.	.	.
Grape (*Vitis sp.*)	.	X	.	.	X	.	.	.
Copperleaf (*Acalypha sp.*)	X	X	.	.	.	X	X	.
Amaranth (*Amaranthus sp.*)	.	X	.	.	X	X	.	X
Aster family (*Asteraceae*)	.	.	.	.	.	.	X	.
Turtlehead (*Chelone sp.*)	.	.	.	.	.	.	X	.
Dogwood (*Comus sp.*)	.	.	.	.	X	.	.	.
Goosegrass (*Eleusine sp.*)	X	.	.	.	.	.	.	X
Bean family (*Fabaceae*)	.	.	.	.	.	X	.	.
Carpetweed (*Mollugo verticillata*)	X	.	.	.	.	.	.	.
Sorrel (*Oxalis sp.*)	.	.	.	X	.	X	.	.
Pokeweed (*Phytolacca americana*)	X	X	.	X	X	.	X	X
Grass family (*Poaceae*)	.	.	.	.	.	X	.	.
Buckwheat family (*Polygonaceae*)	.	X	.	.	.	.	.	.
Purslane (*Portulaca sp.*)	X	X	.	.	X	X	X	X
Cinquefoil (*Potentilla sp.*)	.	.	.	.	.	X	.	.
Nightshade (*Solanum sp.*)	.	X	.	.	.	.	.	.
Vervain (*Verbena sp.*)	.	.	.	.	.	X	.	.
Violet (*Viola sp.*)	X	.	.	X	.	.	.	.

The flotation sample from Feature 9, the possible prehistoric pit house or a natural treefall, yielded 43 pieces of wood charcoal and 15 uncarbonized modern seeds. The wood charcoal included a small number of identifiable taxa, consisting of ash (*Fraxinus* sp.), hickory (*Carya* sp.) and oak (*Quercus* sp.), as well as fragments of unidentifiable ring porous wood (e.g., oak, ash, and hickory) and unidentifiable specimens. No conclusions about forest type can be posited from this small assemblage, nor is it clear if the wood charcoal assemblage is a byproduct of the

prehistoric occupation of the site or incidental wood charcoal introduced during historic land clearing at Locust Grove. The seeds from the Feature 9 sample include violet (*Viola* sp.) and sorrel (*Oxalis* sp.) (see Appendix G). As noted above, these specimens are not considered potentially prehistoric and are more likely contaminants introduced during the collection and processing of the flotation sample.

Flotation samples from nineteenth-century pit features (Features 4, 5, and 7) and sheet midden/landscaping contexts (Strata B, C, and E) contained wood and wood charcoal, carbonized nutshell, and uncarbonized seeds (see Appendix G). Two hundred sixty-four fragments of wood and 132 fragments of wood charcoal were recovered from the feature and midden samples (see Appendix G). The amount of wood from Feature 4 is moderately high, although the identifications suggest that all the fragments are from a single piece of decaying wood (see discussion below). The amount of wood charcoal among the features and midden is moderate to low, suggesting secondary deposition.

The wood recovered from Feature 4 is slightly decomposed and difficult to identify; however, the specimens that were examined exhibit consistent morphological characteristics. They are all a ring porous wood type with numerous tyloses, attributes characteristic of oaks and chestnut (*Castenea dentata*). The wood charcoal assemblage contains a small number of identifiable specimens, including hickory, ash, oak, and maple (*Acer* sp.), as well as fragments of unidentifiable ring porous (e.g., oak, ash, and hickory), diffuse porous (e.g., maple), and coniferous woods, and unidentifiable specimens (see Table 20). No conclusions regarding forest type can be posited from this small assemblage, although the general composition suggests that a mixed hardwood forest was present in the vicinity of the site.

Two fragments of carbonized hickory nutshell were recovered from one of the Feature 4 samples (see Table 20). The context and the carbonized nature of the specimens suggest that they may represent food refuse.

Weed seeds are ubiquitous among the historic samples, occurring in 83 percent of the samples; seeds from edible fruits occur in 42 percent of the samples, and a single seed from a shrub that produces an extremely bitter fruit was recovered in one sample. Although some of the weed seeds may be associated with the historic occupation of the site, the majority had intact epidermis and embryos that appeared relatively fresh. These specimens are probably contaminants that were introduced during the collection and processing of the flotation samples. Many of the fruit seeds, including blackberry (*Rubus* sp.), nannyberry (*Viburnum* sp.), and grape (*Vitis* sp.), appear to be somewhat deteriorated, and may be refuse associated with historic subsistence activities. The single chokeberry (*Aronia* sp.) seed is considered to be an incidental inclusion.

The floral assemblage from Features 4, 5, 7, and 9 and Strata B, C, E, and F (SUs B1, C1, E, and F) at the Locust Grove Site is insubstantial, and provides limited information regarding the historic occupation of the site. In particular, the results suggest that a mixed hardwood forest was present in the vicinity of the site and that fruits (blackberry, nannyberry, and grape) and nuts were part of the historic diet. The relatively low density of floral remains from the historic

contexts is reflective of their secondary depositional context. The single sample for the one prehistoric/natural pit (Feature 9) provides inconclusive information. Finally, the single control sample from the sterile subsoil (Stratum F) indicates that there is minor contamination from bioturbation and complements the interpretation that many of the seeds are modern contaminants.

E. SOIL CHEMISTRY ANALYSIS

Nine soil samples were submitted to the University of Delaware Soil Testing Laboratory for chemical analysis. Because concentrations of particular soil trace elements can be correlated with certain activities, soil chemical analysis can aid in identifying activity areas and general patterns in the use of space at a site. Historic activities at Locust Grove became fairly evident as the fieldwork progressed, so the principal objective of the soil chemical analysis was to assess, if possible, the association of Feature 9 (pit house/treefall) with human activities. Soil samples were, therefore, taken from the feature as well as from the surrounding subsoil. Several samples were also taken from historic deposits, mainly for comparative purposes.

TABLE 21

RESULTS OF SOIL CHEMISTRY ANALYSIS, LOCUST GROVE SITE (7NC-F-73)

PROVENIENCE	CHEMICAL TEST*					
	Org.%	P	K	Mg	Ca	pH
Unit 27/Stratigraphic Unit C1	1.1	47.9	68.1	71.4	656.7	6.0
Unit 30 /Stratigraphic Unit F	1.2	28.5	55.4	102.5	660.7	5.9
Unit 35/Feature 5, Level 1	1.4	13.9	38.1	42.7	880.9	7.2
Unit 50/Stratigraphic Unit C1	0.6	25.6	50.4	47.8	390.6	6.0
Feature 4, Level 1	1.8	162.2	117.0	78.5	1,219.3	6.3
Feature 9, Level 2	1.2	45.3	90.4	68.1	624.4	6.5
Feature 9, Level 2	1.1	16.8	38.3	99.7	457.0	5.6
Feature 9, Level 1	1.2	46.0	77.8	57.6	689.4	6.4
Unit 52/Stratigraphic Unit F	1.2	94.0	118.3	80.4	1,042.1	6.7

* Chemical Tests: Org.%–percent of organic matter; P–available phosphorous; K–potassium, Mg–magnesium; Ca–calcium; pH–soil acidity

The relative frequencies of phosphorous, potassium, magnesium, calcium, and soil pH were examined for the nine samples submitted for analysis (Table 21). Phosphorous levels are probably the most important of the chemical markers indicative of human activities on an archaeological site. High phosphorous levels are often caused by the deposition of feces, urine, or organic matter, and could result from the deposition of organic waste or purposeful manuring, or could indicate an area where animals were confined (Custer et al. 1986; Hoseth et al. 1994). Because phosphorous does not readily move within a soil profile, elevated phosphorous levels in non-historic depositional contexts are commonly associated with prehistoric occupation (Wagner 1992). Concentrations of potassium result from the deposition of wood ash either through surface burning or by the dumping of ash from a stove or fireplace. Calcium concentrations can result

from agricultural liming, the deposition of shell, or the presence of lime-based building materials such as cement or mortar. Concentrations of magnesium are affected by most of the processes or variables that control the levels of calcium, although magnesium is especially elevated if dolomitic limestone fertilizer has been applied. Samples with a pH reading of greater than 7.0 indicate alkaline soils, while readings below 7.0 indicate acidic soils (Custer et al. 1986:90-91); the soils of Delaware are naturally acidic (Mathews and Lavoie 1970).

As shown in Table 21, the highest phosphorous levels of those portions of the site analyzed occur in Feature 4 and in SU F (subsoil) in Test Unit 52, the latter deposit being located near the western edge of the East Block. The presence of 67 bone fragments (the majority of which were unidentifiable) and teeth in Feature 4, together with the high phosphorous content, suggests that this deposit had contained a relatively high concentration of organic refuse compared to some of the other deposits tested. The subsoil in Test Unit 52, on the other hand, did not yield any prehistoric cultural material, even though its phosphorous level was the second highest of the nine samples tested. The rather low concentration of phosphorous in Feature 5 (see Table 21) in the west yard, on the other hand, suggests that this deposit did not contain much in the way of organic refuse, a notion supported by the sparse faunal assemblage from the feature (N=8). Soil samples taken from Feature 9 yielded phosphorous levels in the low to middle range, while the subsoil just outside the feature (SU F in Test Unit 3) produced similar results.

Potassium levels for the nine samples more or less mirrored those for phosphorous (see Table 21). The highest concentrations of potassium occurred in Feature 4, SU F in Test Unit 52, and Feature 9, Level 2. The high potassium level in Feature 4 (and the more modest levels in Feature 5 and SU C1) is probably the result of ash dumping; potassium concentrations in Feature 9 and in the subsoil are less easily explainable, but may be from surface burning.

Of the nine samples, calcium was most heavily concentrated in the sample taken from Feature 4, and is probably due to the large number of oyster shells present in that deposit. As shown in Table 21, a high calcium level also characterizes SU F in Test Unit 52. Although no shell was recovered from SU F, it directly underlay SU E, the nineteenth-century deposit that yielded six pieces of lime and over 2.5 kilograms of oyster shell; the calcium concentration in SU F may, therefore, be the result of leaching. Leaching may also account for the calcium levels in Features 5 and 9. Feature 5, which yielded only modest quantities of shell, was overlain by SU B, which produced over nine kilograms of this material. Feature 9, which likewise contained only a small amount of shell, was directly overlain by Feature 4, which contained 3.317 kilograms of oyster shell as well as 18 pieces of lime. Magnesium concentrations are fairly varied and do not correspond very closely with the levels derived for calcium.

Given the amount of shell recovered from several of these deposits, pH values might be expected to be higher (i.e., over 7.0). In fact, only one sample, that taken from Feature 5, yielded a pH over 7.0. In some instances, such as Feature 4, which yielded both the highest phosphorous and calcium levels of the deposits analyzed, the pH may be offset by the concentration of organic remains.

VIII. SYNTHESIS

A. THE HISTORIC OCCUPATION OF LOCUST GROVE

In this chapter some of the major historical archaeological findings resulting from the investigations of the Locust Grove Site (7NC-F-73) are examined and the results of the artifact, feature, and stratigraphic unit analyses synthesized with the historical information presented in Chapter V. The following discussion considers two of the research issues, landscape and domestic economy, developed for Delaware as presented in De Cunzo and Catts (1990), and as reviewed in Chapter IV of this report.

1. Landscape

In 1761, Robert Meldrum purchased 125 acres of woodland from Richard Cantwell, his wife, Sarah, and his sister, Lydia, thus acquiring the core of what would later become Locust Grove. For the next 32 years, until his death in 1793, Meldrum apparently occupied and farmed his 125 acres. Almost nothing is known, however, about Meldrum's farm—what he raised, or even the location of his farmstead, although the deed information indicates that this original tract was located north of the Bohemia Cart Road (present-day SR 299). No evidence has come to light archaeologically to indicate that Site 7NC-F-73 was occupied during the second half of the eighteenth century, although some of the earlier ceramic wares found scattered across the site might be associated with the Meldrum occupation.

It is not until the first decade of the nineteenth century, after Samuel Pennington had acquired the property, that we are provided with any solid information concerning the farm. In 1804, Pennington's tax assessment listed a dwelling, a kitchen, a barn, a stable, and a crib (corncrib). The precise location and arrangement of the farmstead are still unclear. However, prior to the 1820s, outbuildings, whether household-related or farm-related, were usually placed in relatively close proximity to the farmhouse (Herman 1987:232). The four outbuildings on Pennington's farm are actually below the average number of six to seven that apparently characterized the farmsteads in St. Georges Hundred during the period from 1760 to 1820 (Herman 1987:62).

The free-standing kitchen was a typical feature of eighteenth- and early nineteenth-century Delaware farmsteads. The farm kitchen was usually of log or frame construction, consisting of one room and a loft. Kitchens, as Herman (1987:63) observes, were "spaces for rough domestic work—especially food preparation, but also spinning and weaving." They were also sometimes used to house slaves or servants, an arrangement that may have been true for Samuel Pennington, who owned four slaves early in the century. Stables were often of log construction and generally no larger than 24 feet square, the size required to shelter a team of horses or oxen. Barns were rectangular, built of log or frame, and were sometimes as large as 44 by 24 feet. Interiors were usually divided into three bays, an arrangement corresponding to the English or Yankee barn found elsewhere in the United States. Corncribs during the eighteenth and early nineteenth

centuries could vary considerably in size, and were either long and narrow with lath or slatted sides, or were small rectangular log structures (Herman 1987:63-70).

By 1810, Pennington had more than doubled the size of his farm, to over 300 acres. A tax assessment six years later, however, lists only three structures on the property: a dwelling, a barn, and stables. The detailed Orphans' Court record made after Pennington's death in 1824 suggests that he had made a number of changes and improvements to his farmstead during the previous years. Referred to as "Meldrum Farm," it is described as having a one-story log house and kitchen under one roof, with an adjoining shed, a granary, a barn with stables, a smokehouse, and a wagon house. An 1827 Orphans's Court record describes the farmstead, at that time apparently occupied by a tenant, in much the same way. The reference to the house and kitchen is interesting. As early as the late eighteenth century, farmers had begun to incorporate kitchens into the overall house plan, and this trend came to be more common during the early nineteenth century as the difference between domestic space and the working farm was accentuated. Kitchens were sometimes moved to abut the house or were connected to it by the construction of an intervening room or passageway (Herman 1987:63).

Over the next 20 years, as Samuel Pennington, Jr., reached his majority and established a household at "Meldrum Farm," the house continued to be described in the tax records as a log dwelling, a description that is at odds with the Greek Revival section of the present house that was thought to have been built during the 1830s (Historic American Buildings Survey 1995). In any event, and almost certainly by the early 1850s, Pennington had constructed his new two-story center-passage dwelling on the northern side of the Bohemia Cart Road.

Although the exact location of the eighteenth- and early nineteenth-century farmstead associated with the Locust Grove property has not been positively identified, either historically or archaeologically, the likelihood is fairly high that it was situated in the vicinity of the current farm complex. Once established, farmsteads were generally left in place, due to the high cost in time, labor, and money involved in relocation (LBA 1994). This, of course, did not prevent farmers from reorganizing the structural core of their properties. Although nineteenth-century New Englanders provide the best-known example of farmstead reorganization (Hubka 1984), over the course of the nineteenth century farmers in southern New Castle County, particularly the wealthier landowners, were not averse to moving structures or replacing them with new buildings (Herman 1987).

Like many farmsteads in the Northeast and Middle Atlantic regions of the United States during the eighteenth, nineteenth, and twentieth centuries, Locust Grove shows a fairly strong association with the local transportation network (Allen 1852; Hubka 1984; Manning 1984; Robin 1783). Samuel Pennington, Jr.'s, Greek Revival dwelling, for example, is located within 150 feet of the former Bohemia Cart Road. Although the practice of locating the farmstead's principal structures near a public thoroughfare appears to have been a longstanding tradition throughout the Middle Atlantic region, in Delaware the association does not seem to be quite as strong, at least for wealthier farmers, who often set their dwellings back from the road. For Locust Grove, the presence of a slight rise in the topography, where the present house is situated, may also have

been a contributing factor in the siting of the farmstead, at least in its mid-nineteenth-century guise.

In contrast to the roadside orientation of Locust Grove, access to a source of surface water does not appear to have been an especially important variable in the choice of location. Although several ephemeral watercourses are located in fairly close proximity to the farmstead, the nearest perennial drainage is 2,000 feet from the farmhouse. Water for human and livestock consumption at Locust Grove would have been obtained from other sources, most likely a well or wells, although none were located during the archaeological investigations.

The spatial organization of the Locust Grove farmstead in the mid-nineteenth century is largely unknown, probably due to construction activities that have taken place over the past 50 or more years. Surviving architectural elements include, of course, the dwelling, and the smokehouse located to the rear. The Greek Revival section of the house was built during Samuel Pennington, Jr.'s, ownership of the property. Based on the tax records, it was constructed no earlier than about 1850, when this style of architecture was falling out of favor, and at a time when many other middle-class and elite farmers were reorganizing their properties and otherwise changing the architectural landscape of southern New Castle County (Herman 1987). This portion of the house was built perpendicular to the road, with its main entrance facing east. The orientation of the house is unusual for a period when middle-class or well-to-do farmers throughout the eastern United States were building (or, in some cases, moving) their houses to face the road, and were creating formal, refined, front yard spaces between the house and the public thoroughfares that fronted their properties. While it might be suggested that this section of the house had been built as an addition to an earlier structure, the archaeological evidence strongly suggests that it was the first building in this location.

In any event, it appears that the yard between the house and the road was used for the disposal of at least some of the refuse generated by the Pennington and Hoffecker households during the decades between about 1820 and 1870. The low percentage of ceramic vessel completeness, and the highly fragmented condition of the ceramics, glass, and faunal remains uncovered in Stratigraphic Unit E and in Feature 4, indicate that most of the household trash was discarded elsewhere on the property, probably to the rear (west) of the dwelling. This moderate-level discard in the front yard seems to have continued until the 1870s, when the Second Empire section of the house was built.

The construction of the new front section of the house was carried out during the lifetime of Samuel Pennington, Jr., apparently while his son, Franklin, was living, and farming, at Locust Grove as a tenant. The new structure was one element in a number of important alterations made to the landscape, and seems to have marked an important change in the way the Penningtons presented themselves to themselves and to their neighbors and other members of their social and economic class. The main entrance and front of the house now faced the road. The new front section itself, with its mansard roof and bay windows, was built according to one of the current architectural styles, the Second Empire, favored by the well-to-do during the third quarter of the nineteenth century. The form of the house, its footprint, on the other hand, was fairly conservative, and was laid out according to the Georgian center-passage plan.

Along with the expanded and reoriented house, the front yard also seems to have taken on a new appearance. The results of the excavations indicate that considerable landscaping activity took place during the 1870s and 1880s. Portions of the front yard were filled; the yard midden represented by Stratigraphic Unit E was covered by a deposit of brick and thermally-altered cobbles (SU C1/Feature 11) that may have come from an end chimney attached to the Greek Revival section of the house. Two more layers of fill were subsequently added to level the front yard, truncating and covering Feature 4 in the process. Filling and leveling of the side yard also appear to have occurred during this general period. Feature 5, although containing the earliest ceramic assemblage recovered from the site, appears to have been formed during the 1880s. This ceramic material, along with late nineteenth-century bottle glass, may represent a house-cleaning event, or the redeposition of mixed refuse from another part of the property, put here to fill in a shallow depression in the yard. This deposit appears to have been quickly covered by two more layers of landscaping fill (SU A and SU B) to level the ground surface. Once the filling and leveling had been completed, a number of trees were added to the yards; several of the mature trees still standing at Locust Grove, particularly the spruces and horse chestnuts, probably date from this period.

By the end of the 1800s, the broad-scale disposal of household refuse in the front and west side yards—those portions of the property visible from the road—had largely ceased, although some trash, i.e., nails or bits of glass, was scattered across the yards as sheet refuse. In keeping with refined standards, trash was apparently disposed of out of sight, either behind the house or outside the bounds of the farmstead altogether. Aside from keeping up appearances, health and safety considerations may also have come into play as people became increasingly aware of the connection between sanitation and disease.

During the twentieth century, the house again appears to have been reoriented. At some point the walkway (Feature 1) leading from the front porch to the drive was covered over and planted with grass. The main entrance, for both the family and visitors, appears to have been one of the doorways in the old Greek Revival section of the house. The principal focus of the property for much of the twentieth century appears to have been the yard and drive east of the house and the areas, including the outbuildings, to the rear of the dwelling.

In contrast to the domestic core of the farmstead (or at least the house and front and west yards), very little is known about the working sphere of the property during the 1800s. Except for the smokehouse, which appears to be contemporary with the Greek Revival portion of the house, none of the nineteenth-century outbuildings have survived. All of the other standing structures at Locust Grove date to the twentieth century. Archaeological evidence of nineteenth-century support structures is equally lacking. A cement foundation located 300 feet north of the house appears to be the remains of a barn, probably constructed during the twentieth century. Although the outbuildings (which would have included a barn, a stable, and other structures) were probably arranged courtyard-fashion to the rear of the house, this cannot be demonstrated empirically. Little evidence was recovered behind the house to indicate activity or refuse disposal areas, or features such as privies or wells, dating to the nineteenth century. Any such evidence would almost certainly have been obliterated by the installation of the built-in pool, landscaping, and other twentieth-century construction.

2. Domestic Economy

As discussed in Chapter IV, domestic economy encompasses the range of means, including production, reproduction, and consumption, employed by a family or household to achieve its goals. These goals might include simple survival, or geographic, occupational, economic, and/or social mobility. Elements of a household's domestic strategy can include the composition and occupational structure of the family or household, home production, and consumer behavior (De Cunzo and Catts 1990:17).

a. Architecture

One of the principal capital investments that a rural household could make was the construction of a house and its accompanying outbuildings. Students of historic architecture have noted that, in general, house size varied with an individual's or a family's economic status: those who were better off built bigger houses, and furnished them accordingly, and those at the lower end of the economic scale made do with smaller, usually less well appointed, dwellings. For middle-class and elite nineteenth-century farmers, the farm dwelling, often along with the barn, was the principal outward sign of economic success and class standing.

By almost any standard, the house at Locust Grove was large, particularly in its expanded form near the end of the nineteenth century. This can be seen in Table 22, which gives the first-floor dimensions of a number of nineteenth-century houses in Delaware. The examples in the table have been drawn from several sources, including the floorplans in Herman's (1987) *Architecture and Rural Life in Central Delaware, 1700-1900*, and from a number of archaeological sites summarized in Grettler et al. (1996). While the houses included in Table 22 cannot be considered a truly representative sample, they do provide some idea of the range in the variation of house sizes in nineteenth-century rural Delaware, and provide a broader context for Locust Grove.

In terms of overall size, Locust Grove falls near the upper end of the group in Table 22. Except for Mayfield, occupied by a tenant/farm manager, all of the houses with over 1,500 square feet of first-floor space were owner-occupied and had been built by economically well-placed or elite families like the Cochrans, who commissioned numerous buildings in central Delaware during the nineteenth century (Herman 1987) and to whom the Penningtons were related by marriage. With the exception of Hedgelawn, which had been constructed all at one time, the larger dwellings had, in effect, grown by accretion. The original Greek Revival section of Locust Grove, built by Samuel Pennington, Jr., was actually fairly modest in scale and no larger than houses constructed by middling farmers like George Buchanan in Green Spring (see Table 22). At some point in the nineteenth century, Pennington built an addition onto the northern end of the original house, expanding it to 864 square feet. The major addition to the house, however, and a reflection of the Pennington family's economic success over the preceding decades, was the Second Empire section that was apparently built during the 1870s. The new section of the house nearly doubled the size of the dwelling, to 1,700 square feet; the earlier Greek Revival portion of the house appears to have been transformed into a kitchen wing, with living space on the second floor.

TABLE 22

FIRST-FLOOR DIMENSIONS OF LATE NINETEENTH-CENTURY HOUSES IN NORTHERN AND CENTRAL DELAWARE

HOUSE/SITE	DESCRIPTION	DIMENSIONS (feet)	AREA (square feet)
Greenlawn[a]	Brick core	23x47	1,081
Owner-occupied	Brick addition	14x28	392
	Brick addition	19x39	741
	Brick addition	19x22	418
			2,632
Achmester[a]	Frame core	44x19	836
Owner-occupied	Frame wing	41x19	779
	Frame ell	19x30	570
	Frame pantry	19x11	209
			2,394
Geraldsville[a]	Brick core	31x19	589
Owner-occupied	Brick wing	23x19	437
	Brick ell	17x21	357
	Brick ell	17x22	374
			1,757
Locust Grove	*Original frame*	*18x37*	*666*
(7NC-F-73)	*Frame addition*	*18x11*	*198*
Owner-occupied	*2nd Empire addition*	*22x38*	*836*
			1,700
Muddy Branch[a]	Frame core	33x18	594
Owner-occupied	Frame addition	28x26	728
	Frame parlor wing	20x18	360
			1,682
Hedgelawn[a]	Frame core	40x28	1,120
Owner-occupied	Frame ell	16x34	544
			1,664
Mayfield[a]	Brick core	44x20	880
Tenant/manager-occupied	Brick ell	35x18	630
			1,510
C. Kimmey House[b]	Brick core	27x20	540
(7KC-D-119)	Frame kitchen	33x16	528
Tenant-occupied	Shed addition	12x15	180
	Shed addition	8x6	48
	Porch	16x6	96
			1,392
John Read House[b]		46x29	1,334
(7NC-E-53)			
Owner-occupied			

Table 22 (continued)

HOUSE/SITE	DESCRIPTION	DIMENSIONS (feet)	AREA (square feet)
C.J. Biggs House[a]	Log core	27x21	567
Owner-occupied	Frame addition	18x21	378
	Frame addition	17x21	357
			1,302
Buchanan Tenant House[b]	Frame core		720
	Frame kitchen		432
			1,152
Hawthorn House[b]	Original log	29x21	609
(7NC-E-46)	Frame addition	12x21	252
Owner-occupied	Frame kitchen	12x17	204
			1,065
Buchanan-Savin House[b]	Frame core		320
(7NC-J-175)	Frame kitchen		288
Owner-occupied	Frame addition		384
			992
Wilson-Slack House[b]	House	32x30	960
(N-6269)			
Owner-occupied			
Moore-Taylor House[b]	Original frame	24x12	288
(7K-C-380)	Kitchen addition	20x12	240
Owner-occupied	Porch	30x7	210
	Porch	12x7	84
			822
H. Wilson-Lewis House[b]	Original frame	20x20	400
(7K-C-375)	Addition	8x12	96
Owner-occupied	Porch	6x30	180
	Addition	6x10	60
			736
Temple House[b]	Original frame	16x24	384
(7NC-D-68)	Frame addition	16x20	320
Tenant-occupied			704
Ferguson House[b]	Original frame	16x24	384
(N-3902)	Frame addition	18x15	270
Tenant-occupied			654
W. Eager House[b]	Original frame	30x20	600
(7K-C-383)			
Tenant-occupied			
Cazier Tenancy[b]	Original brick	17x17	289
(7NC-F-64)	Addition	17x9	153
			442

Table 22 (continued)

HOUSE/SITE	DESCRIPTION	DIMENSIONS (feet)	AREA (square feet)
Dickson II House[b] (7NC-E-82) Tenant-occupied		18x22	396
Grant Tenancy[b] (7NC-B-6)	Original frame Addition	16x15.5 6x16.5	248 99 347
Heisler Tenancy[b] (7NC-E-83)	Core	12x21	252

[a] Measurements taken from floorplans in Herman (1987)
[b] Grettler et al. (1996)

b. Ceramics, Glass, and Other Items

Among the various aspects of domestic economy/consumer behavior, foodways are one of the more amenable to archaeological interpretation. Ceramics played an important role in foodways, and several of the excavated deposits at Locust Grove, particularly those in the East Block, contained extensive ceramic assemblages comprising a wide variety of vessels relating to food service, storage, and preparation. Unfortunately, none of the deposits at Locust Grove could be tightly dated or attributed to a particular household. As discussed in the preceding chapter, the vessel assemblages covered time spans of 50 or more years, during which two or more households are known to have resided at the site—the households of Samuel Pennington, Jr., James Hoffecker, and, later, Franklin Pennington. Another consideration is the fact that domestic servants and farm laborers were also living and presumably taking meals at Locust Grove. It is possible that they were using cheaper tablewares than their employers and that this may also be reflected in the archaeological record at the site. Further complicating the picture is the extent of off-site disposal, not only of ceramics, but of glass vessels as well, a problem that has been noted at other nineteenth-century sites in Delaware (Grettler et al. 1996). All but 11 of the ceramic vessels are less than 25 percent complete, and most are represented by only one or two sherds. This suggests that the vessels are undercounted and that entire vessels are missing from the MNV counts. Despite the problems with assignability and vessel representation, several trends in the use of ceramics at Locust Grove during the nineteenth century are evident.

Ceramic vessels related to the storage and preparation of food (e.g., jars, baking dishes, milk pans, jugs, and pie plates) formed a significant percentage (15.8%) of the 981 vessels recovered from the site. The fact that many of the nearly 400 vessels whose function could not be determined were yellowwares, stonewares, and particularly coarse redwares that may have been used in the kitchen, suggests that the actual percentage of these vessels in the site assemblage was considerably higher. Of the 155 food preparation/storage/multifunctional vessels recovered from the deposits at Locust Grove, all but five are redwares. The high percentage of redwares among

the identifiable vessels (181, or 32.5%) is perhaps unusual for contexts dating from the 1820s through the 1880s; at the Moore-Taylor Farm (1822-1937), a small owner-occupied and tenant-occupied farmstead in Kent County, by comparison, only 11.7 percent of the 239 identifiable vessels were redwares (Grettler et al. 1996). On the other hand, only two of the redwares from Locust Grove are table forms (none were identified as teaware, representing less than 0.4% of the total assemblage), compared to 13.5 percent at the Moore-Taylor Farm (Grettler et al. 1996).

As noted, redwares dominated the food preparation and storage vessels at Locust Grove. Although yellowware utilitarian vessels became available on a nationwide basis after the mid-nineteenth century (Gates and Ormerod 1982), and by that time had largely replaced redware in the kitchen, this ceramic type was not as common at Locust Grove as might have been expected. Of the total number of vessels, 21 (2.1%) are yellowwares, while only two could be assigned to the multifunctional (food preparation/service) category, less than 0.4 percent of the identifiable forms. Extremely low percentages of yellowware have also been documented at other nineteenth-century rural sites in Delaware (Grettler et al. 1996; Hoseth et al. 1994; Scholl et al. 1994).

Taken together, the greatest percentage of the ceramic vessels discarded at Locust Grove during the nineteenth century consisted of teawares and tablewares, the vast majority of which were whiteware (see Chapter VII). Teawares purchased by the Locust Grove households during the nineteenth century included a relatively large number of cups and saucers with a variety of floral handpainted designs (used separately, for 'teas' [see below] or at mealtimes in conjunction with the numerous blue shell edge plates present in the assemblages), as well as a number of tea-service vessels with sponged decoration. Analysis of the ceramic assemblages also indicates that the site occupants purchased several examples, in at least eight different patterns, of fairly expensive transfer-printed teawares and tablewares at various times during the period, from roughly 1825 to 1864. The highly fragmented nature of the assemblage, unfortunately, does not allow us to conclude that these were purchased as sets. Following the popular trend in ceramics preferences, the Hoffecker and/or Franklin Pennington households appear to have acquired a set or sets of plain whiteware dinnerware in the latter half of the nineteenth century, possibly as replacements for their older transfer-printed wares, or for everyday use. Although they probably did not use elaborate table settings like the one illustrated in Jonathan Periam's (1884) *Home and Farm Manual* (Figure 25), the households that occupied Locust Grove during the mid-1800s do appear to have followed the practices of their middle-class and elite contemporaries in creating a genteel atmosphere at mealtimes.

The recovery of contrasting sets of tablewares suggests, and this is very tentative given the mixed deposits, an elaboration of family meals into more or less important events, a trend that Wall (1994) observed among early nineteenth-century middle-class households in New York City. As Wall notes, the contrasting sets of ceramic dishes were used as markers to rank the different level of importance of each meal (Wall 1994:146). For urban middle-class households, certain family meals, particularly dinner, became secular domestic rituals, in effect celebrating the reunion of the family whose male members now increasingly worked outside the home (Wall 1991, 1994). By the second half of the nineteenth century, the ritualization of meals had been adopted by some of the more "progressive" rural households, who "took notice of the standards of decorum being

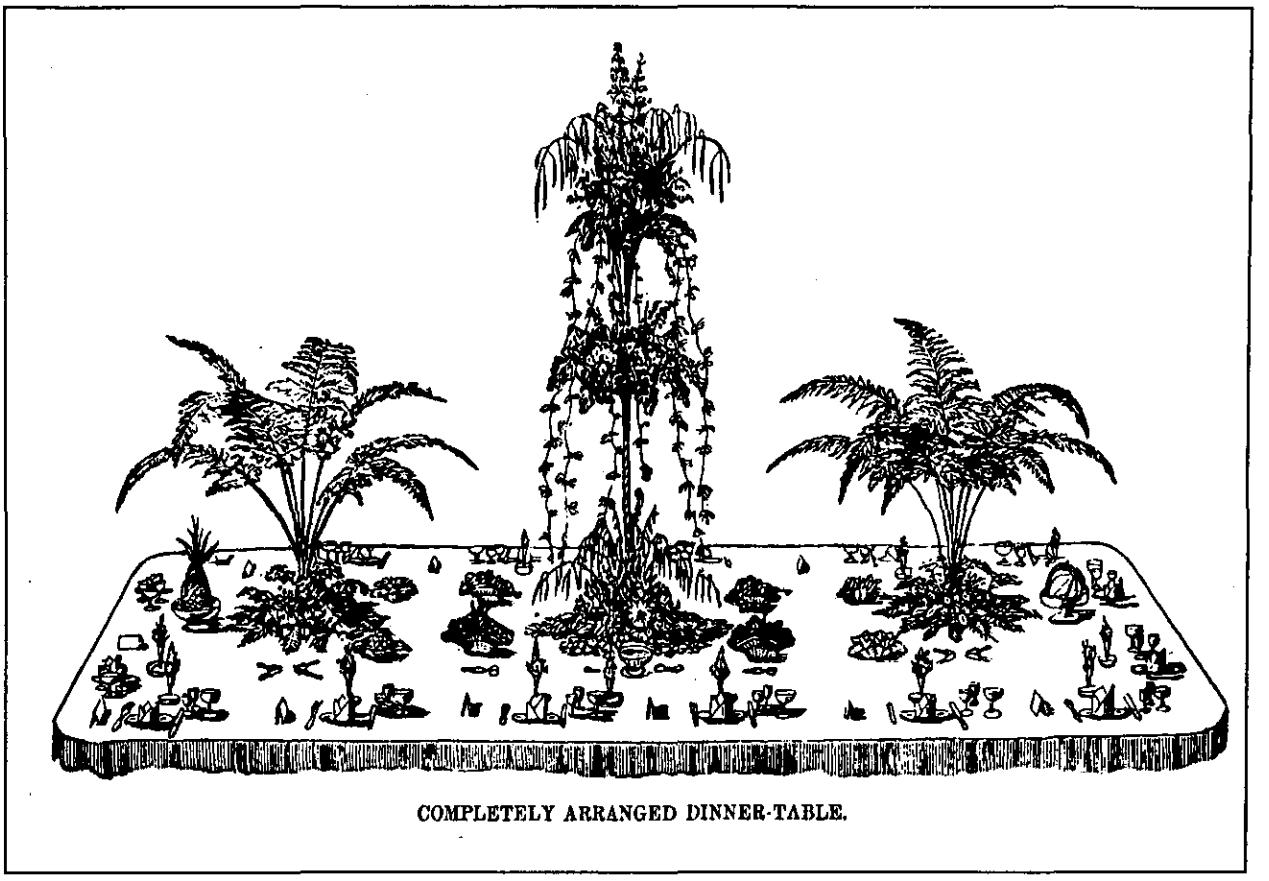


FIGURE 25: Dinner Table Arrangement Recommended in Periam's *Home and Farm Manual* *Source: Periam 1884*

fashioned in middle-class culture at large" (McMurry 1988:113), and such may have been the case for some of the households residing at Locust Grove. Similarly, middle-class and wealthier rural women also appear to have adopted the custom of taking afternoon tea. In general, these tea parties were probably less formal than their urban counterparts, serving as a reinforcement of the mutuality that linked neighboring farm families, rather than competitive displays designed to impress one's friends and acquaintances with the refined gentility of the hostess's household. The latter of course cannot be ruled out, particularly for the rural elite. The overall lack, at Locust Grove, of the more expensive porcelain or gilded teawares common during the early and mid-nineteenth century suggests the informality of such occasions—assuming of course that they were held at all. The transfer-printed forms recovered from the site, however, may have been used to reinforce class/social identity, as part of social teas with neighbors and friends or during family meals.

In marked contrast to the many and various shell edge, plain, and transfer-printed flatwares recovered from the excavations was the near absence of bowl forms that would have been used for the consumption of liquid or semiliquid foods such as porridges, soups, and stews. The vast majority of the tablewares were plates, suggesting a diet that would have been heavy on prime meat cuts such as steaks or roasts.

In addition to ceramics, the Locust Grove households during the nineteenth century also possessed a variety of glass tableware, although these formed relatively minor percentages of the recovered kitchen items. Among the identified glass tableware forms, tumblers were the most frequent; portions of several unidentifiable tableware forms were also present in the deposits. In contrast to the numerous inexpensive tumblers, which were probably used on a fairly frequent basis (possibly in conjunction with the shell edge plates), stemwares (e.g., water goblets and wine glasses) are virtually absent. Only three stemware vessels were recovered from the entire site.

Glass bottles and other containers used in the kitchen were also present in the Locust Grove deposits. However, like the glass tablewares discussed above, these vessels represent only relatively small percentages within any of the kitchen assemblages. One might expect kitchen-related glassware to increase over time (and to be reflected in the landscaping deposits laid down near the end of the century), given the wider availability and decreasing cost of these items after the mid-nineteenth century. Yet this does not appear to be the case at Locust Grove, suggesting that either the site's occupants did not make extensive purchases of glassware and bottled products, or that when these items were broken or their contents emptied, they were disposed of elsewhere on the site, away from the house. Given the fragmentary nature of the glass assemblage in the front yard deposits, the latter is a strong possibility.

Over the course of the nineteenth century, the various households at Locust Grove made considerable expenditures for ceramic teawares and tablewares as well as more limited purchases of glassware and bottled products. The ceramics purchased over the period from roughly 1820 to 1880 ranged from relatively inexpensive shell edge plates for everyday use to more costly wares that were probably reserved for Sunday dinners or special occasions such as family gatherings.

In addition to kitchenwares, the Locust Grove households acquired, used, and discarded a variety of personal, clothing, furnishings, arms-related, tobacco, architectural, and activities-related items. Generally speaking, these small finds seem to be reflective of common nineteenth-century rural domestic assemblages, and it is evident that the Locust Grove households took advantage of new consumer goods as they became available. Overall, the household items recovered from the site suggest refined if not opulent furnishings. Fragments of several jardinieres used to hold flowerpots or planters (possibly used in the parlor/family room), sherds of glass bowls, the metal and glass drawer pull, and the brass-tipped fireplace poker all hint at the manner in which the house was furnished during the latter half of the nineteenth century, and point to well-to-do Victorian tastes.

c. Dietary Patterns and Self-Sufficiency

The archaeological assemblages from Locust Grove have provided only limited information concerning the dietary patterns that characterized the nineteenth-century occupation of the farmstead. Of the 530 teeth and bone fragments recovered from the site, for example, only 129 could be identified as to species, and all were from the major domesticates: pig, cow, sheep/goat, and chicken. Pig and cow were the most highly represented mammal species at the site; the

range of pig elements suggests the consumption of hams, which were either eaten as pork or consumed after curing on-site, while the diagnostic elements from cow suggest the preparation of roasts. Both chicken and sheep/goat remains were extremely limited in frequency and otherwise nondiagnostic, although the latter appear to include butchering waste. No fish or wild fauna were represented in the Locust Grove assemblage. The floral remains from the site are even more limited, but do suggest the consumption during the nineteenth century of hickory nuts, blackberries, nannyberries, and grapes.

The presence of butchering waste at Locust Grove points to a certain degree of self-sufficiency among the various households that occupied the site during the nineteenth century. The maintenance of some level of independence was a goal of many farmers throughout the Northeast and Middle Atlantic regions. While some embraced the expanding market wholeheartedly, most tried to strike a balance between market involvement and the traditional goal of economic independence (Clark 1990; Friedlander 1990; Merrill 1977; Vickers 1990).

Because butchering is directly relevant to the issues of domestic economy and self-sufficiency, discussion of the evidence of this activity at Locust Grove is appropriate in this context. It is assumed that the butchering of livestock on-site suggests some degree of self-sufficiency, while the purchase of butchered meats reflects a greater dependence on the growing market economy.

The overwhelming majority of the identifiable faunal remains recovered from the various depositional contexts at Site 7NC-F-73 appeared to consist of table refuse and processing waste (see Chapter VII). Butchering waste, related primarily to pig and cow, was encountered in relatively small quantities. Despite the overall paucity of identifiable faunal remains, the range of faunal elements (particularly the cranial elements and teeth) present in the deposits suggests that at least some of the animals consumed on the site during the nineteenth century were probably slaughtered there. Based on the faunal data, it appears reasonable to conclude that the Locust Grove households were, for the most part, self-sufficient in terms of meat consumption and, as the discussion below points out, in the production of other basic foodstuffs such as wheat and potatoes.

Farmsteads in the region at the beginning of the nineteenth century were largely self-sufficient agricultural enterprises characterized by a greater emphasis on home manufacturing and a greater orientation to local as opposed to interregional trade or market networks. However, within a decade or two, farm households, particularly in northern Delaware, were becoming less self-sufficient as they adopted market-oriented strategies based on the sale of wheat and surplus dairy products (Michel 1984, 1985). Northern farms were the most intensively cultivated in the state. More than three-quarters of the farmland in this region was improved, and the average farmer tilled two-thirds or more of his improved land. Farmers in the large farm belt, which includes St. Georges Hundred, used more labor per farm than in any other region, and bought more machinery for their labor forces to operate. As Michel (1984) observes, this employment of a substantial labor force allowed large farmbelt landowners to increase their income. As capital, this income would permit them to expand further, and as money, it would allow them to revolutionize rural life in Delaware, as they participated in the expansion of the capitalist market and became the state's rural middle class (Michel 1984).

The historical, architectural, and, perhaps to a more limited extent, archaeological data pertaining to Site 7NC-F-73 indicate that the farm and its occupants were in many respects typical of nineteenth-century St. Georges Hundred. By 1850, Samuel Pennington, Jr., had reversed his property's decline and created a prosperous agricultural enterprise based largely on the production and sale of wheat. The agricultural census data for the period 1850-1880 (see Table 2) indicate that the farm, under the management of Samuel Pennington, Jr., James Hoffecker, and Franklin Pennington, produced a variety of crops, including wheat, oats, Indian corn, and Irish potatoes. Like many of their contemporaries in Delaware, the Penningtons also participated in the peach boom which occurred in the central interior region of Delaware after the middle of the nineteenth century. In 1870, Locust Grove had produced $3,000 worth of orchard products, twice the average for St. Georges Hundred; 10 years later, the property contained 4,000 peach trees, again above the average for the hundred. Indeed, the income from peach cultivation may have helped provide the family with the wherewithal to build the new addition to their house. That the Penningtons hedged their bets in terms of the agricultural economy is evident in the yields for wheat and corn, which remained well above the mean for this part of the state.

In general, the crop selection at Locust Grove remained fairly stable throughout the period from 1850 to 1880 (see Table 2). The production of wheat, which was a staple for human consumption, fluctuated somewhat but increased from a low of 275 bushels in 1850 to a high of 900 bushels in 1880. Despite fluctuations in the composition and size of the Pennington households, which ranged between eight and 10 individuals, including family members, laborers, and domestic help (there is no information for James Hoffecker), the amount of wheat harvested would have been more than sufficient to meet the dietary needs of the farmstead occupants, with a considerable surplus that would have been sold on the market. Potatoes, which formed an effective alternative to bread for many northern farm households (see Larkin 1988:173-174), were grown in varying quantities throughout the period from 1850 to 1880. The quantity of potatoes harvested fluctuated from a low of 30 bushels in 1860 and 1880, to a high of 100 bushels in 1860 (see Table 2), and this crop probably formed a dietary supplement of varying importance throughout the period.

There was also a marked emphasis on animal feed, with a concentration on corn and, to a lesser extent, oats. Corn was produced throughout the period from 1850 to 1880, varying from 275 bushels in 1850, to 3,000 bushels in 1860 and 1870. Oats were reported only in 1860, during Hoffecker's tenancy, and in 1880, and averaged around 1,100 bushels.

According to the agricultural census figures, the size of the dairy herd at Locust Grove varied somewhat during the period from 1850 to 1880, ranging between four and 12 head (see Table 2). For this same period, the home manufacture of butter also varied, ranging between 450 pounds in 1860, and 200 pounds in 1880. Unlike his contemporaries, who, in 1880, averaged 4,269 gallons of fluid milk (see Table 3), Franklin Pennington reported no production of milk. The home production of butter or other milk products is evidenced materially at Locust Grove by the presence of at least 23 milk pans recovered during the archaeological investigations. For many farm households, although particularly in the dairying regions of New England and New York State, butter and cheese were dietary staples (Larkin 1988:171). In 1860, according to

Bateman (1978), the average per capita consumption of butter was roughly 25 pounds, while an average of just over five pounds of cheese per person was consumed (Bateman 1978:351-356). As shown in Table 2, the quantities of butter produced at Locust Grove during the 30 years covered by the agricultural census data were sufficient to at least meet the needs for home consumption and, on occasion, to yield an appreciable surplus that may have been put up for sale.

Up until the second half of the nineteenth century, dairying was generally the province of women, who milked the cows and processed the butter and cheese which formed a substantial portion of many farms' marketable surplus (Jensen 1980, 1986; McMurry 1988). On a well-to-do farm like Locust Grove, the farm wife (Mary Pennington, wife of Samuel Pennington, Jr., for example), may have been directly involved in dairying or may have supervised the work. We know that during the 1840s and 1850s, the household of Samuel Pennington, Jr., included a number of African-American females, like the 17-year-old Hannah Euphron listed in the 1850 census, who probably worked at a range of domestic chores. These individuals may very well have handled much of the dairying work, and it is at least possible that the milk pans recovered from Locust Grove are associated with their activities (see Yentsch 1991 for a discussion of gender roles and utilitarian ceramic vessels).

B. PREHISTORIC ARCHAEOLOGICAL RESOURCES AT LOCUST GROVE

As noted previously, a limited number of prehistoric artifacts (including an Archaic-Woodland I Piney Island point) were recovered during the data recovery excavations at the Locust Grove Site (7NC-F-73). The occurrence of these items was somewhat unexpected, given the results of the Phase I and Phase II investigations. Except for a single piece of quartz block shatter collected from the subsoil in the western half of the East Block, all of this material was recovered from disturbed, i.e., historic, contexts. The East Block excavations also encountered an oval stain or feature (Feature 9) which, once excavated, bore some resemblance to the Type 2A or Type 1 Woodland I (3000 BC-AD 1000) pit house features described by Custer (1994) (Figure 26). Intact pit houses, as defined by Custer (1994), are shallow circular or oval depressions, forming a basement, with a deeper D-shaped pit, or sub-basement, at one end. On extensively disturbed sites the deeper pit is often all that survives. It is assumed that these sub-basements (similar in shape to Feature 9) would have functioned as storage pits. Excavations at the Snapp Site, roughly 10 miles north of Site 7NC-F-73, and the Leipsic Site, about 20 miles south of the Locust Grove Site, resulted in the recovery of artifacts from several of these sub-basement features, leading to the conclusion that once the materials within the storage pit had been consumed, the pit was used as a repository for household refuse (Custer 1994:50).

Other researchers (Mueller and Cavallo 1995; Thomas 1995), while acknowledging that pit houses are present in Delaware, have cautioned that many of the roughly 2,000 D-shaped pits uncovered in the state may in fact be caused by the uprooting of trees. Thomas (1995) has pointed out that a number of similar features, of non-Native American origin, have been excavated, and some of them have been found to contain historic artifacts. Mueller and Cavallo (1995), citing a number of sources on the impact of tree falls on forested environments, have argued that a variety of different depression shapes—some similar to the types defined by Custer—are produced by treethrows.

The excavations at Locust Grove strongly suggest that Feature 9 is not associated with Native American occupation of the site. The fact that only historic artifacts (including a fragment of broad window glass, dating from 1820 to 1926) were recovered from the first two levels within the feature, and that no cultural material whatsoever was found at the base of Feature 9, does not support the notion that it was used as a storage pit by Native Americans. A more likely explanation is that Feature 9 represents a historic treefall, possibly associated with the clearing of this portion of the property during the nineteenth century. The floral analysis of samples from Feature 9 was inconclusive; the recovered seeds are modern, and the wood charcoal could not be attributed to either the historic or the prehistoric occupation of the site. The OCR dates derived from the samples taken from Feature 9 and the sterile subsoil are also ambiguous. The control sample and the two samples from Level 2 of the feature were within 300 to 500 years of one another (5,569 to 6,100 years BP), and several hundred years too early for the Woodland I period. The most recent date, 3,700 years BP, which falls within the Woodland I period, was derived from a soil sample recovered from Level 1 of Feature 9, which also contained a number of historic artifacts.

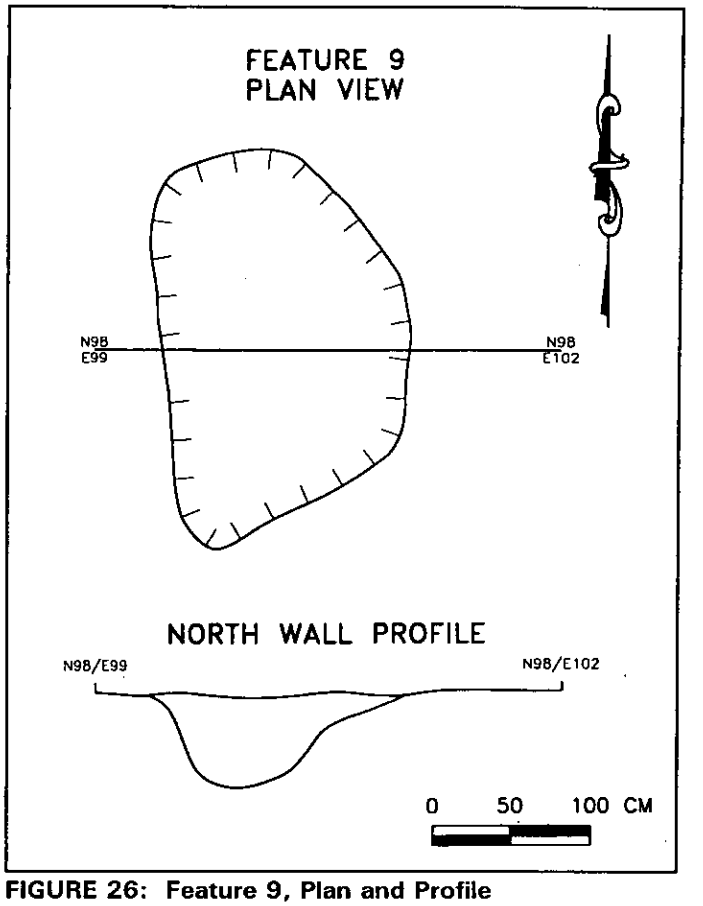


FIGURE 26: Feature 9, Plan and Profile

There is no doubt that Locust Grove was occupied by Native Americans, probably during the Woodland I period. However, the nature and duration of the occupation(s) cannot be ascertained based on the limited data recovered from the site, nor can any connection be made between the aboriginal occupation of the site and Feature 9.

C. PROBLEMS AND PROMISES OF FARMSTEAD ARCHAEOLOGY: METHODS EMPLOYED AT LOCUST GROVE AND SOME DIRECTIONS FOR FUTURE RESEARCH

Nineteenth-century farmsteads pose a unique, and often complex, set of challenges to the historical archaeologist, and Locust Grove proved to be no exception. The data recovery excavations at Locust Grove provided an opportunity to examine a historic archaeological site that had not been plowed and where the dwelling, dating to the nineteenth century, was still standing.

There are, of course, advantages and disadvantages to looking at a site of this type. On the minus side, sites like Locust Grove, which have been continuously occupied for extended periods, have often been extensively modified, with more recent activities disturbing or destroying earlier deposits or features. At Locust Grove, twentieth-century construction, particularly the installation of the in-ground pool, has disturbed or eradicated any earlier (i.e., nineteenth-century) archaeological remains located immediately to the rear of the house, normally an area at a domestic site where some of the richest archaeological features and deposits are found. Twentieth-century construction and landscape modification also appear to have masked the location(s) of nineteenth-century outbuildings and activity areas that were once located behind the dwelling. The archaeological sampling design, discussed below, also determined the visibility of nineteenth-century farmstead components. Therefore, as noted earlier, it has not been possible to delineate in any comprehensive fashion the spatial organization of the farmstead over time.

On the plus side, the archaeological deposits that formed at Locust Grove over the course of nearly two centuries, at least those relatively undisturbed by later construction, have not been churned and mixed by plowing, which often happens when a farmstead is abandoned and converted to farmland. We can thus trace, at least in part, the changes that occurred in the front and west side yards—changes that appear to be associated at various times with the construction, expansion, and reorientation of the Locust Grove house. The refuse deposits and landscaping episodes uncovered at the site therefore provide some evidence from which we can draw inferences about the residents' attitudes toward the disposal of household trash, their concepts of how the "public" space between the house and road should be organized, and the ways in which they expressed and reinforced their social identities through the medium of material culture. The archaeological remains at Locust Grove (the deposits, features, and artifacts), together with the house, which still retained much of its original fabric at the time of the fieldwork, thus provide us with an image—albeit incomplete and out of focus—of how the owners and occupants of the property viewed themselves and how they presented themselves to the world outside the household.

The archaeological fieldwork conducted at Locust Grove also provided an opportunity to evaluate some of the methods applied to the investigation of historic farmsteads. It is by now standard practice at most of the sites examined in Delaware to superimpose a close-interval shovel test grid over the known location of the farm complex during Phase II investigations in order to identify archaeological features and deposits. The Phase II shovel testing program was reasonably effective in this regard, resulting in the identification of several artifact concentrations that warranted evaluation through the excavation of test units. Several of these test units were later expanded into block excavations in the front and west side yards.

Unlike at many of the historic sites excavated in Delaware, no machine stripping was conducted at Locust Grove. This particular method is normally reserved for plowed sites; a certain percentage of the plowzone is systematically sampled through test unit excavation, and then the remaining plowed soil is removed by machine to uncover features that extend into the subsoil. Because of the somewhat more complicated stratigraphy in the front and west side yards, soil stripping of these portions of the site was not seriously considered; machine excavation was

initially planned for the rear areas of the farmstead, but difficulties with the property owner prevented this work from being carried out.

The block excavations, particularly those in the front yard, provided a suitable method for investigating the complicated sequence of landscaping deposits, pits, and refuse concentrations that characterized this part of the Locust Grove site. Use of the concepts developed by Edward Harris (1989) during the analysis phase of the project allowed the stratigraphic relationships between the various excavated contexts to be reconstructed with a fairly high degree of reliability.

Apart from the stratigraphic reconstruction of the front and side yard deposits, the results of the data analysis were rather mixed. For example, soil chemical testing at Locust Grove was inconclusive or, generally, served to confirm what was already evident from the excavations. It should be pointed out, however, that the soil chemical testing was focused mainly on the suspected prehistoric feature rather than on the historic contexts at Locust Grove. Similarly, the results of the floral analysis provided only limited information regarding the historic occupation of the site. Faunal remains recovered during the excavations were a bit more informative, yielding some data on the dietary habits and preferences of the site's occupants.

Analysis of the artifacts recovered during the excavations, on the other hand, has provided some valuable insights into the range of material culture used by the households that occupied Locust Grove during the nineteenth century. The ceramic minimum vessel counts demonstrated the overwhelming dominance of flatwares among the table forms, strongly suggesting the consumption of the more expensive cuts of meat. Based on their numbers, shell edge plates appear to have been used on an everyday basis for family meals, a function that may have eventually been taken over by the plain whitewares and ironstones. The more expensive transfer-printed wares may have been reserved for more formal occasions. The ceramic forms associated with beverage consumption consist exclusively of teacups (and their related saucers/bowls) in a variety of decorated styles, most of which were modestly priced polychrome handpainted or sponged teas. A much smaller number are transfer printed and may have been purchased as parts of sets. Most of the remaining identifiable vessels are food preparation/storage or food preparation/serving forms.

The analysis of the glass vessels recovered from Locust Grove was inconclusive, mainly due to their highly fragmented condition, which in most instances prevented conclusive functional identification, especially for the bottles. It is also suspected that bottles, once their contents had been consumed, were discarded elsewhere on the property. While inexpensive tumblers were present in some quantity, more costly stemwares were almost completely absent, suggesting that these forms were carefully curated and used only for special occasions.

In addition to ceramics and glass artifacts, the personal, clothing, activities, and other items collected during the excavations at Locust Grove help to fill out, even if imperfectly and incompletely, a picture of the material lives of the site's inhabitants during the nineteenth century.

What other types of analysis might be appropriate, in the future, for a site like Locust Grove? As discussed in Chapter IV, landscape studies have become increasingly important in historical

archaeology. Buildings, fencelines, features, and artifact concentrations are identified in the field using a variety of excavation techniques, while certain activity areas (animal pens, for example) can also be delineated using soil chemistry analysis. The latter can be particularly effective when samples are taken systematically over a large area, i.e., the entire farmstead, an approach used regularly on Delaware historic sites, particularly those that have been plowed. Another analytical method applicable to landscape archaeology is palynology—the study of plant pollen. While palynological studies have been applied successfully on historic archaeological sites (Bryant and Hall 1993; Kelso 1994), this type of analysis has not been regularly employed on cultural resource management projects in either Delaware or the surrounding states. Pollen grains often survive when other plant material does not, and are useful for tracking changes in the vegetation at and around a site through time, thus making it possible to address the issue of shifts in land use, the presence of ornamental plants, and so forth. For a site like Locust Grove, where the ornamental vegetation survived until nearly the end of the twentieth century, the use of tree borings might also prove informative. The ability to count growth rings, particularly those of the older and larger trees, would provide further data on the changes that have occurred to the landscape over time.

D. CONCLUSION

The historical and archaeological investigations of Locust Grove (Site 7NC-F-73) have provided some important data regarding rural lifeways in northern Delaware during the nineteenth century, and have contributed information pertinent to the historic contexts and research themes developed for the state. In many respects, Locust Grove is probably fairly typical of the middle-class/elite farmsteads in southern New Castle County. In terms of settlement pattern and landscape, the site, as least as it was developed by Samuel Pennington, Jr. (the exact locations of Robert Meldrum's and Samuel Pennington, Sr.'s, farmsteads are uncertain), demonstrates a fairly strong roadside orientation common among farmsteads throughout the Middle Atlantic region.

By the middle of the nineteenth century, Samuel Pennington, Jr., had created a prosperous agricultural operation, and like many of his well-to-do neighbors he chose to express his economic success, and his apparent embrace of their class values, architecturally with the construction of a new Greek Revival-style house. It also appears that he chose to orient his new house perpendicular to the road, a choice that was out of keeping with standard practice. Most farmers during the nineteenth century, whether in Delaware or elsewhere in the Middle Atlantic region or the Northeast, built their houses to face the road and created a refined, formal space between their dwelling and the public thoroughfare. In contrast, the front yard at Locust Grove appears to have been used for the disposal of some of the occupants' (probably the households of Samuel Pennington, James Hoffecker, and Franklin Pennington) kitchen refuse.

All this apparently changed during the 1870s. Near the tail end of St. Georges Hundred's building boom, the Penningtons built a new Second Empire addition to the house, this time with the front facing the road, and set about landscaping the grounds. Household trash was no longer disposed of in the front yard, at least not in the volume that it had been previously. Although we do not know where the household dumped trash after the 1880s, it was probably disposed of out of sight behind the house or in the fields.

For much of the nineteenth century, the various occupants of Locust Grove apparently managed a prosperous agricultural enterprise. Although the historical data pertaining to the management of the farm during the late eighteenth and the very early nineteenth century are only suggestive, by 1850, Samuel Pennington, Jr., was running a successful, diversified operation based on the cultivation of grain crops and the sale of wheat. By the middle decades of the nineteenth century, the Pennington household was able to make some major capital improvements to their property, evidenced by the construction of the Greek Revival section of the house. They, and the families that succeeded them, were also to expend not inconsiderable amounts for household items, including several sets of ceramic teawares and tablewares. Although the archaeological investigations of Site 7NC-F-73 uncovered no evidence of agricultural structures dating to the nineteenth century, it is likely that during this same period the Penningtons made capital improvements to their agricultural operations, either through the construction of new outbuildings or the upgrading of existing ones.

The members of the Locust Grove households were avid consumers who evidently kept up with current trends in available household amenities, certainly in terms of the ceramic styles popular with other well-to-do families in other areas of the country during the mid-nineteenth century. The Penningtons also appear to have been cognizant of trends in architectural style, choosing to build a substantial addition to their house in the Second Empire form.

Like many farm households in the Middle Atlantic region during the nineteenth century, the Penningtons (and the Hoffeckers) were largely self-sufficient in terms of meeting their dietary needs. Wheat (baked into bread), as well as milk and butter, were probably staples of the diet, as were pig, beef, and to a lesser degree, chicken and sheep. Roasts, steaks, and hams were evidently consumed by the Locust Grove households, and were occasionally supplemented by soups or stews.

Disposable income realized from the sale of agricultural products allowed the occupants of Locust Grove to purchase a wide variety of mass-produced consumer goods, which were becoming more widely available by the mid-nineteenth century, largely as a result of improvements in the regional transportation system. These purchases, probably made at one of the local stores (perhaps in Odessa or Middletown), linked these households to both regional and international market networks, and provided them with the material means to express their social and class identity.

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GLOSSARY

agrarian	Relating to or concerning the land and its ownership, cultivation, and tenure.
amaranth	One of the annuals in the genus *Amaranthus*, it was cultivated for food and for its showy red and green flower clusters.
apothecary	The term for an eighteenth- and nineteenth-century pharmacist who prepared and sold drugs.
archaeology	The study of past human culture through the systematic recovery and analysis of the artifacts/material evidence left behind.
archival research	Research conducted in places where public or historical records, charters, and documents are stored and preserved.
argillite	A metamorphosed mudstone cemented by silica and lacking slaty cleavage.
artifact	Any object shaped or modified and produced by man, or as a result of human activity.
assemblage	Collection of persons or things: in this context, the collection of artifacts from a particular site, from a stratigraphic level or cultural component within the site, or of a particular artifact class, such as lithics or ceramics.
bay	The longitudinal subdivision of a building by columns, piers, arches, girders, etc.
biface	A stone tool bearing flake scars on both faces.
bioturbation	Disturbance to soils from root action.
broad glass	Also called cylinder glass; window panes formed from a flattened glass cylinder.
CC Index	A set of CC index values for English ceramics has been generated for the period 1787 to 1880. CC ware was the cheapest refined type of ceramic for this period and was used as a base for the index. The index values were created by dividing the cost of CC ware into the cost of the other ceramic types. These index values are used to compare the cost between excavated ceramic assemblages.

Census, U.S. An official count of the nation's population taken every 10 years, often including a collection of demographic information.

chert A fine-grained, siliceous, sedimentary rock, generally light-colored; an impure variety of chalcedony, resembling flint.

chronology Pertains to the basic temporal units of prehistory and the time span reflected in archaeological site stratigraphy.

cordwainer An eighteenth- and nineteenth-century term for a leather worker and sometimes a shoemaker.

cortex Natural rind or weathered outer layer on flint-like materials; observations of cortex provide information on tool manufacturing techniques and on methods of raw material procurement; presence of cortex indicates early- to middle-stage tool manufacturing activity.

cracked rock Includes all fragments of lithic debris that cannot be attributed to stone-tool production; represents cobbles and/or chunks of local bedrock that may have been used in heating or cooking activities (fire-cracked rock).

cripple Historic term meaning wetland or marshland.

cross section A transverse of a portion of a feature, horizontally and vertically removing soil from one section.

crown glass Window panes formed from a disk of hand-blown glass.

cultigen A cultivated plant for which a wild ancestor is known—for example, corn.

culture A uniquely human system of behavioral patterns, beliefs, habits, and customs acquired by man through a nonbiological, uninherited process, learned by his society.

datum A point, line, or surface used as a reference, as in surveying.

debitage Residual lithic material resulting from tool manufacture; represents intentional and unintentional breakage of artifacts through either manufacture or function; debitage flakes may represent the various stages of progress of the raw material from the original form to the finished tool.

de facto In reality or fact; actual.

demography The study of the characteristics of human populations, such as size, density, distribution, growth, and vital statistics.

diachronic	Referring to two or more reference points in time.
diagnostic	An artifact that can clearly be dated and/or identified as to maker, date, place or origin, etc., thus serving as supporting evidence.
distal	Opposite end from the point of attachment.
ephemeral site	A transitory site or one that was occupied for a very short period of time.
epidermis	Outer skin.
ethnobotany	The analysis and interpretation of the plant lore and agricultural customs of a people.
extant	Still in existence.
fallow field	A plowed field left unseeded for a growing season.
faunal remains	Includes both bone and shell refuse, as well as tools and ornaments.
feature	Any soil disturbance or discoloration that reflects human activity, or an artifact that is too large to be removed from a site and is just recorded—for example, a house, storage pits, etc.
ferrous	Containing iron.
floral remains	Includes both charred and uncharred plant materials such as seeds, nuts, shells, and wood.
flotation	The process of sifting soil samples through a fine screen while running a steady stream of water over the sample; residual materials such as tiny artifacts, seeds, and bones are separated out into light and heavy fractions for analysis.
foodways	The interrelated systems of food procurement, preparation, and consumption.
geomorphology	The study of landforms; concentrates on both the description of landforms and the chemical and physical processes that create the features present at the surface of the earth.
granary	A storage building for threshed grain.

Greek Revival Style	Architectural style common from circa 1825 to 1860, characterized by a low-pitched gabled or hipped roof and a wide band of trim at the cornice line (where the roof joins the wall).
grid	The two-dimensional intersection network defining the squares in which archaeologists excavate.
hinterland	The land directly adjacent to and inland from a coast. Also a region remote from urban areas situated beyond cultural centers; backcountry.
historic	The time period after the appearance of written records. In the United States, this generally refers to approximately 1600 AD, the period after the beginning of European settlement.
historical archaeology	The archaeology of the period from initial European settlement to today.
hundred	A historic term representing the administrative division of some American and English counties.
indenture	A contract binding a person to work for another for a specified period of time in return for payment of travel and maintenance expenses.
in situ	In the original place.
intersite	Between sites; often used in the context of comparison.
intestate	A person who dies without a will.
intrasite	Within a site.
intrasite patterning	Horizontal and vertical site structure; focuses on the delineation of task-specific activity areas and site formation processes.
jardiniere	A decorative container for plants or flowerpots.
jasper	An opaque cryptocrystalline quartz of a variety of colors, usually yellowish brown to reddish brown.
kinship	A socially recognized family relationship based on the connection by blood, marriage, or adoption.
lithic	Of, related to, or made of stone.

loam — A loose, fertile soil composed of a mixture of silt, clay, and sand containing organic matter.

locus — A defined archaeological site or testing location.

manumit (manumission) — To be freed from slavery or from personal bondage or servitude.

marsh — A tract of soft, wet land usually characterized by grasses, cattails, and related vegetation, often forming a transition zone between water and land.

material culture — That segment of the physical environment which is purposely shaped by humans.

Mean Ceramic Date (MCD) — A date obtained from the study of historic ceramics recovered from a site that approximates the median date of the site or deposit.

messuage — A building, especially a dwelling, often cited in deeds and other property transaction records.

midden — A refuse heap usually containing household and domestic debris.

Minimum Number of Vessels (MNV) — This is the minimum number of vessels represented by the sherds from an archaeological assemblage.

mitigation — In archaeology, refers to minimizing the destruction or disturbance of an archaeological site by a construction project, erosion, farming practices, etc., through excavation of the site and systematic recovery of the artifacts or other material representative of past life.

Munsell Notation System — A standard means of describing all color gradations along scales of value, hue, and color. Archaeologists use this system in describing and standardizing soil color descriptions. The Munsell system is usually used in association with a description of soil type.

Orphans' Court Records — The county court responsible for the welfare of orphans when a father died without a will. The Orphans' Court watched over the estate until the children (if any) reached majority. A guardian appointed by the court was to make periodic returns of the estate to the court. When the youngest heir came of age, the property could be divided among the heirs. These court

records are filled with information regarding income, property, education, repairs of houses and outbuildings, contracts, and other useful material about eighteenth- and nineteenth-century life. Spelling variations of Orphans' Court include "Orphans Court" and "Orphan's Court."

outbuilding — A building other than the principal building on a property—for example, on an eighteenth- or nineteenth-century farm, smokehouses, dairies, stables, and corncribs were typical outbuildings.

palynology — A specialized form of botanical analysis which examines residual pollen and spores.

paradigm — An intellectual tradition that conditions the way in which its followers generate, perceive, and interpret data; a pattern or model.

patent/proprietary medicine — Non-prescription drug with a registered trademark.

perch — A measure of distance and acreage used by early surveyors, equal to 16.5 feet. Also called a pole, rod, or rood.

Phase I — Determination of the absence or presence of a site.

Phase II — Further investigation of a site to define its limits and integrity.

Phase III — Data recovery phase of archaeological investigation. Usually involves intensive archaeological and historical investigations to recover as much data as possible and mitigate the effects of proposed construction.

physiographic province — Regions or areas that are characterized by a particular geology, topography, or geography.

phytolith — Tiny silica particles contained in some plants. Sometimes these can be recovered from sites and used to identify the plant even after it has decayed.

plowzone — That portion of the stratigraphy in which plowing has taken place; generally abbreviated as the "Ap-horizon."

porringer — A small-handled vessel for eating soups or stews.

posthole — A hole dug in the ground into which a post is placed.

post mold	The organic stain in the ground which is left by a decayed wooden post. A post mold stain may occur inside a posthole stain on a site.
probate	The judicial certification of the authenticity or validity of a will.
profile	A side view of a feature or test unit.
quartz	Crystalline, nonmetallic, mineral consisting of silicon dioxide; typically occurs in hexagonal crystals or crystalline masses.
research design	A strategy developed at the beginning of a project to guide the research.
rhyolite	A light-colored, extrusive, igneous rock with abundant quartz and a very fine-grained texture.
Second Empire Style	Architectural style common from circa 1855 to 1885, characterized by mansard (dual-pitched hipped) roof with dormer windows on steep lower slope.
sediment	Soil deposited by wind, water, or glaciers.
settlement pattern	Pertains to a group's adaptation to the environment within a regional perspective.
sherd	A piece of broken pottery or glass.
sloop	A sailboat that is single masted and fore and aft rigged with a short standing bowsprit or none at all.
socioeconomic	Applies to the interrelationship between economic wealth (or poverty) and social position or status.
soil horizon	Soils are divided into three horizons, which reflect different kinds of chemical and physical processes that have resulted from changing climatic conditions.
stratigraphy	The origin, composition, and succession of natural soil or rock or cultural layers.
stratum	(1) a mass of sedimentary deposits laying in a vertical sequence, and (2) a layer in which archaeological material (as artifacts or dwelling remains) is found within a site.
steatite	Soapstone; fine-grained, relatively soft, compact rock whose principal constituent is talc.

subsoil — Sterile, naturally occurring soils not changed by human occupation.

subsistence — A source or means of obtaining those materials essential to the maintenance of life, such as food and shelter; in archaeology, subsistence deals primarily with dietary composition and food-procurement strategies.

subsurface — Below the surface; not visible from the surface.

sundry — Various; miscellaneous small articles or items.

synchronic — Referring to a single period in time.

Tax Assessment Error List — A supplementary tax assessment list made after the initial tax assessment to correct errors.

taxables — A historic term for a person taxed for real or personal property. Most taxables were white males over the age of 21 who were eligible to vote. Widows, minors, and the estates of deceased persons, however, were also sometimes taxed.

terminus post quem (TPQ) — The "date after which" an archaeological stratum or feature's fill was deposited, based on the date of the most recent artifact found in the stratum or fill.

tithable — A tenth part of one's annual income contributed voluntarily or due as a tax.

transect sampling — A means of archaeological research design in which the sampling element is a square or rectangular grid.

truncation — Partially cut off; for example, plowing "truncates" features and strata in archaeological sites.

tyloses — Botanical; punctuated vessels filled with cellular tissue.

uniface — A stone tool flaked on one surface only.

vegetal waste — Waste from vegetables, especially plants used for foods—for example, corn husks and cobs.

yeoman — An eighteenth-century and earlier English term for a farmer and owner of a small farm.

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Byron Simmons, Laboratory Technician, Material Specialist

Seven years of experience in laboratory processing of archaeological collections.

Catherine Skocik, Field Crew

Over five years of experience in archaeology.

James Skocik, Field Crew

Over four years of experience in archaeology.

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Jane Taylor, Field Crew

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Rob Tucher, Senior Photographer

B.A. in Communications, Rutgers University. Ten years of experience in professional photography of archaeological subjects.

Lee Weber, Field Crew

B.A. in Sociology and Anthropology, Gettysburg College. Over six years of experience in archaeological survey, excavation, and laboratory work.

Sue Wong, Laboratory Technician

Over six years of experience as an archaeological excavator and laboratory technician, on urban historic sites and in cemetery investigations.

APPENDIX A

Public Information Handout

ARCHAEOLOGICAL INVESTIGATIONS AT LOCUST GROVE

The Delaware Department of Transportation, in conjunction with the Cultural Resource Group of Louis Berger & Associates, Inc., is conducting archaeological excavations at the Locust Grove Archaeological Site, near Odessa in New Castle County. The site is in the proposed path of State Route 1. State Route 1 is being constructed to relieve congestion on U.S. 13 and provide a safer, faster route from Wilmington to southern Delmarva and the Ocean beaches.

The Locust Grove Archaeological Site consists of archaeological deposits associated with Locust Grove, a standing nineteenth-century house located on Middletown Road approximately one mile west of Odessa. The Locust Grove house has been determined eligible for listing on the National Register of Historic Places. The house was built in two sections. The earlier portion, a simple, two story frame structure, facing east, dates to the 1830s. What is now the front section of the house, facing Middletown Road, is a two-and-one-half story second empire gothic house with a slate mansard roof and a full length porch, much larger and more impressive than the original structure.

Previous investigation at the site identified intact archaeological deposits and features in the yard areas surrounding the house. A midden deposit containing shell, bones, and large pieces of ceramic vessels was located off the southwest corner of the house. Two features were also located during testing: a brick walkway and a deposit of rubble in the front yard, which might represent the foundation ruins of an earlier house on the site. Intact midden deposits and trash pits were also identified in the yard areas, some dating to the mid-1800s and others to the last quarter of the 19th century.

The present program of excavations has been designed to recover a sample of the midden deposits associated with the house. This data provides excellent data for the study of the Locust Grove inhabitants' material lives. Because the occupants of the house are well documented, this material can be analyzed with regard to their class, ethnicity, and household structure.

At the conclusion of the survey, a report will be prepared for DelDOT and the Delaware State Historic Preservation Office, which interested persons can obtain from DelDOT. Any artifacts found within the state right-of-way will be turned over to the Delaware State Museum. If you would like additional information concerning the project, please contact Kevin Cunningham, DelDOT archaeologist, at 739-4642, or Charles LeeDecker of Louis Berger & Associates at 202-331-7775.

APPENDIX B

Historic American Buildings Survey (HABS) Documentation

HISTORIC AMERICAN BUILDINGS SURVEY

LOCUST GROVE (Meldrum Farm) HABS No. DE-266

Location: 749 Middletown-Odessa Road (DE State Route 299), Middletown, New Castle County, Delaware

USGS Middletown, Del., Quadrangle
Universal Transverse Mercator Coordinates: 18.441840.4367340

Present Owner: State of Delaware
Dover, Delaware

Present Use: Vacant

Significance: The farmhouse at Locust Grove was built in two phases during a prosperous and dynamic period in the history of southern New Castle County and, specifically, St. Georges Hundred. The first section, constructed ca. 1830, incorporates Greek Revival style details, while the later section, constructed ca. 1870, embodies the Second Empire style of architecture. A pyramidal-roof smokehouse located immediately northeast of the farmhouse was constructed ca. 1830. Locust Grove's combined use of Second Empire and Greek Revival architectural characteristics is representative of St. Georges Hundred rebuilding activity and reflects the architectural, agricultural, and social changes of that hundred between the years 1830 and 1899. Locust Grove's farmhouse, smokehouse, and remaining acreage are contributing elements in the Rebuilding St. Georges Hundred (1830-1899) thematic National Register nomination.

PART I. HISTORICAL INFORMATION

A. Physical History:

1. **Date of erection:** ca. 1830, ca. 1870. The older section of the farmhouse appears to date from ca. 1830. It is unclear if this section incorporates an older log house extant on the property in 1830 or if it replaced the log house after 1836, when Samuel Penington, Jr. assumed full possession of the property. The house's use of Greek Revival details suggests a second quarter of the nineteenth century construction date. The newer section of the house appears to date from ca. 1870, based primarily on the building's architectural style.

2. **Architect:** Research conducted to date uncovered no information to suggest who designed either section of the house or smokehouse.

3. **Original and subsequent owners:**

1801 Deed, 4 June, 1801, recorded in Volume W2, page 441. Benjamin & Elizabeth Flintham, and Richard & Christina Flintham to Samuel Penington, Sr.

1823 Will, December 1823, recorded in Volume S1, page 9. Samuel Penington, Sr. to Samuel Penington, Jr.

1899 Will, August 1899, recorded in Volume B5, page 493. Samuel Penington, Jr. to Franklin Penington

1926 Will, 26 August, 1926, recorded in Volume B5, page 493. Franklin Penington to William Lee & Harriett Penington, Roland W. & Madeline P. Bates, John W. & Addie P. Voshell, and Francis M. & Emma P. Richards.

1939 Deed, 11 January, 1939, recorded in Volume D41, page 551. William Lee & Harriett Penington, Roland W. & Madeline P. Bates, John W. & Addie P. Voshell, and Francis M. & Emma P. Richards to Walter C. & Thelma A. Guseman.

1952 Deed, 16 February, 1952, recorded in Volume A52, page 160. Thelma A. Guseman to Walter C., Sr., & Thelma M. Guseman.

1968 Deed, 16 December, 1968, recorded in Volume U81, page 128. Walter C., Sr., & Thelma M. Guseman to Walter C., Jr., & Lavina Guseman.

1980 Deed, 21 March, 1980, recorded in Volume 109, page 0083. Walter C., Jr., & Lavina Guseman to Wallace I., Jr., & Ruth L. Harris.

1993 Deed, 14 October, 1993, recorded in Volume 1604, page 097. Wallace I., Jr., & Ruth L. Harris to State of Delaware.

4. **Builder, contractor, suppliers**: Research conducted to date uncovered no information to suggest who constructed the house.

5. **Original plans and construction**: Original plans and construction documents for the house have not been located. The original cost of the buildings is not known.

6. **Alterations and additions**:

The house was doubled in size ca. 1870 with the construction of the Second Empire style block at right angles to the south facade of the Greek Revival house (ca. 1830). A single-story, shed-roof addition was attached to the northwest corner of the Second Empire block of the house in the mid-twentieth century. A subsequent two-story, shed-roof addition was constructed, abutting the one-story addition, at the northwest junction of the Second Empire and Greek Revival sections. A nineteenth century two-story, shed-roof addition extends across the Greek Revival section's north elevation.

B. Historical Context

Locust Grove and its outbuildings are on land formerly owned by Doctor Joseph Meldrum, who died intestate in 1801. Rebecca Penington, Joseph Meldrum's sister, and her husband, Samuel Penington, inherited a one-third interest in the 120-acre property, and soon thereafter purchased the remaining two-thirds interest from Rebecca's sisters and their respective husbands. The property remained known as Meldrum Farm during Samuel Penington, Sr.'s, tenure, either in acknowledgment of his wife's brother, Joseph Meldrum, or as a continuation of an existing name.

In 1816 New Castle County Tax Lists assessed Samuel Penington, Sr., on 180 acres of improved land and 100 acres of unimproved land. Penington's assessment also included a house, barn, and other unspecified farm buildings, as well as a rented house and rented lot, livestock valued at $252, and a female slave. Samuel Penington, Sr., died in 1823 and willed Meldrum Farm to his son Samuel Penington, Jr. (New Castle County Wills: S1-9). Atlases of New Castle County from the third quarter of the nineteenth century describe the property as Penington's Farm or Locust Grove.

Samuel Penington, Jr. was eight years old when his father died, and, therefore, could not take full possession of his inheritance. Prior to reaching his majority, in 1836, New Castle County Orphans Court conducted yearly valuations of Samuel Penington, Jr.'s property. The January 1830 revaluation noted that his property consisted of approximately 300 acres of land and a one-and-one-half-story log house, a smoke house, a barn, and a granary with a wagon house and corn crib attached. The log dwelling was noted to be in bad repair and the smoke house and barn in tolerable repair (New Castle County Orphans Court Records 1830).

During this period, the area around Locust Grove, called St. Georges Hundred, became the scene of extensive agricultural and architectural improvements due to economic, social, and demographic shifts. By 1850 this hundred was one of the three wealthiest hundreds in Delaware, primarily because of its agricultural output of grains. At this date, Penington's crop production surpassed the average for the hundred. Agricultural

practices later shifted towards peach production, which peaked around 1875 with Middletown becoming the peach growing center for the hundred (Herman et al. 1985; Passmore 1978:69). Samuel Penington, Jr. improved the house during this period with the addition of a Second Empire section (ca. 1870).

Changes to the farm since the nineteenth century have paralleled changes in the hundred as a whole. Farm improvements during the twentieth century led to the destruction of all but one of the nineteenth century outbuildings. Similarly, most of Locust Grove's original land has been sold off, leaving only 3.6 acres of the original tract intact. Much of the disposed property was developed as suburban housing, a common occurrence throughout St. Georges Hundred in the decades following World War II.

PART II. ARCHITECTURAL INFORMATION

A. General Statement:

1. **Architectural character:**

Locust Grove illustrates two general architectural styles: Second Empire (1855-1885) and Greek Revival (1825-1860). The Greek Revival section (ca. 1830) is characterized by a low-pitch, hipped roof, two interior chimneys along the ridge, and classically inspired cornice and trim. The Second Empire section (ca. 1870) is characterized by a mansard roof with dormer windows on the steep lower slope, molded cornices, and decorative brackets beneath wide eaves.

2. **Condition of fabric:**

Locust Grove is in fair condition. All exterior walls are covered with aluminum siding; however, window trim, doorways, cornices, window bays, and the south porch retain much of their original materials, details, and workmanship. While the Greek Revival and Second Empire sections of the dwelling retain the general layout of their historic floor plans, modifications and renovations have altered the plans to some degree. The joining of the two sections, for example, changed the plan of the south room of the Greek Revival Section. The mansard roof of the Second Empire section has begun to leak at each of its four corners, as evidenced by failed plaster, water stains, and rotting wood members in the interior spaces. The wood frieze on the east side of the Second Empire section contains a hole, approximately eight inches by six inches. Plaster walls and ceilings throughout both sections of the house show cracks. Broken first-story windows, removed locks, and missing doorknobs suggest vandalism.

B. Description of Exterior:

1. **Overall dimensions:**

Locust Grove is an L-plan dwelling consisting of two distinct sections (ca. 1830 and ca. 1870). The Second Empire block of the house (ca. 1870) is a three-story, five-bay by two-bay, frame structure. The primary entrance is centered on the south facade, which measures 38'-5" in length. A one-story, screened porch

extends the length of this facade. Each side elevation measures 21'-7" in length and is bisected by a one-story, three-sided bay window. The two story addition west of the junction of the Greek Revival and Second Empire sections of the house measures 7'-10" (north-south) x 11'-0" (east-west). The one story addition immediately west of this addition measures 7'-10" x 11'-3".

An earlier, Greek Revival section (ca. 1830) is a five-bay, two-story, rectangular frame structure at right angles to the Second Empire block. The east and west facades, including the one-and-one-half story shed addition on the north facade, measure 47'-6" and 39'-8", respectively. The north facade measures 18'-5". The south facade abuts the Second Empire block of the house. Three doors pierce the east elevation at uneven intervals.

2. **Foundations:**

Both sections of the house have brick foundations. The porches across the south facade of the Second Empire block and the east facade of the Greek Revival section have concrete slab foundations.

3. **Walls:**

All exterior walls are covered with white aluminum siding.

4. **Structural systems, framing:**

The exterior and interior walls of the Second Empire block of the house are of frame construction. The Greek Revival section is also frame with frame interior walls. Both sections have brick foundations and frame roof structures.

5. **Porches, stoops, balconies, bulkheads:**

The house has a porch on the south facade of the Second Empire section and another on the east facade of the Greek Revival section. A single-story, frame, screened porch extends across the south facade of the Second Empire block (38'-5" x 11'-11"). Four original chamfered porch columns with molded bases, caps, and heavily scrolled brackets are hidden behind the screening and support a standing seam, half-hipped roof. The underside of the porch roof is faced with tongue-and-groove siding. A concrete and brick stoop leads to an entrance at the center of this porch.

A second, open porch extends along the east side of the Greek Revival section from just south of the third bay, north to the end of the two-story, shed roof addition (32'-1" x 9'-3"). Plain wood posts support a standing seam shed roof. The underside of the porch roof is faced with sheets of plywood. Two brick steps lead to a door in the third bay of the rear section, and one step leads to a door in the fifth bay.

6. **Chimneys:**

Two pairs of interior brick chimneys with terra cotta chimney pots are symmetrically placed on the mansard roof of the Second Empire section. Two interior, stuccoed brick chimneys with corbeled brick caps are located at opposite ends of the roof ridge of the Greek Revival section.

7. **Openings:**

a. **Doorways and doors:**

The exterior doors of the house remain largely intact. The primary entrance to the house is centered on the south facade and includes a double-leaf wood door with a raised panel below and a single light above. It is flanked by three-light side lights, and has a four-light transom with cobalt glass. A rear entry is located on the Second Empire section's north facade and includes a four-paneled wood door. Two entrances are located along the east facade of the Greek Revival portion of the house, each with wood doors with two sets of paired panels. Lights are located above each doorway. Additionally, a four-paneled, wood door is located on the east facade of the one-and-one-half-story, shed roofed addition.

b. **Windows and shutters:**

Openings in the east and west bay windows of the Second Empire section are rectangular and include two-over-two double-hung wood sash with original paneled wood shutters. The window openings in the Second Empire section of the house are rectangular and include two-over-two double-hung, wood sash with louvered shutters on the second story and late-nineteenth-century paneled shutters on the first story. All shutters retain their original hardware, links, rings, and Gothic profile trim.

Windows in the Greek Revival section of the house are rectangular and include six-over-six double-hung wood sash on the first story and four-over-four double-hung, wood sash on the second story. Louvered shutters flank the windows on the second story. All of these shutters appear to date from the late nineteenth century based on their configuration and molding profiles.

8. **Roof:**

a. **Shape, covering:**

The Second Empire portion of the house has a concave mansard roof covered with polychrome slate imbrication. The roofs of the east and west bays are clad with composition asphalt shingles. The low-pitched, hipped roof over the Greek Revival block is clad with a standing seam metal roof.

b. **Cornice, eaves:**

A box cornice with wood brackets and drop finials forms the base of the mansard roof. The east and west bays exhibit large "S" brackets beneath the cornice. The box cornice of the Greek Revival section is simpler in detail than that of the Second Empire block's but includes similar wood brackets.

c. **Dormers, cupolas, towers:**

Three symmetrically-placed, segmental-arched, two-over-two double-hung, wood sash dormers are located along both the north and the south slopes of the mansard roof of the Second Empire block, while the east and west slopes have single, centrally placed dormers of like design. The Greek Revival section has no dormers.

C. Description of Interior:

1. **Floor plans:**

The interior of the Second Empire section of the dwelling contains a central stair hall that rises through the third floor and is flanked by two rooms per floor that extend the full width of the building. The first floor hall contains an open stair along its east wall. The first floor rooms flanking this stair hall each contain a three-sided bay along their respective exterior end walls. A door located in the northwest corner of the west room's north wall leads into a single-story mud room addition that provides access to the north (rear) yard area. A large opening in the east room of the first floor connects the Second Empire block of the house with the Greek Revival block. The second floor of the Second Empire section includes a similar arrangement of rooms to that of the first floor. A bathroom located on the second floor of the corner addition is accessed directly from the Second Empire section's stair hall. The third floor remains consistent in style and detail with the first and second floors, with the exception of deep window placements due to the mansard roof.

The Greek Revival section consists of five bays divided into two rooms on the first floor, three rooms on the second floor, and an enclosed stair. On the first floor, the north room has been renovated into a modern kitchen, while the south room connects directly to the Second Empire section through a large opening. An enclosed stair is located against the south room's north wall at the Greek Revival section's primary entrance. A door near the southwest corner on the west wall of the south room leads into a bathroom in the two-story addition. A door located along the north wall of the south room leads into a butler's pantry behind the enclosed stair and into the kitchen. The second floor contains three rooms and a narrow stair hall. The south room contains two openings leading into the east room of the dwelling's Second Empire section. The second floor level of the north section is two steps higher than that of the Second Empire section.

A one-and-one-half story addition abuts the north facade. This addition contains a single room on the first floor with two unfinished rooms in the garret.

2. **Stairways:**

The stairway in the center of the Second Empire block of the house has an open, simply articulated stringer, and a stained wood balustrade composed of turned balusters and a rounded handrail. The balustrade terminates at a heavy, turned newel post that includes a rounded newel cap. The stairway in the Greek Revival section of the house is completely enclosed from the first to the second story.

3. **Flooring:**

The Second Empire section of Locust Grove contains predominantly wood flooring. The floor of the first floor stair hall is covered with black and white checkered linoleum that has begun to peel up, revealing a wood floor beneath. The east room of this section contains green wall-to-wall carpet, as does the adjoining south room of the Greek Revival section. The west room of the Second Empire section retains its original wood floor. Linoleum floors are in the mud room off of the west room of the Second Empire section and in both bathrooms. The second and third floors of the Second Empire section also retain their original wood floors, though the floors of the stair halls on both floors are partially obscured by red carpet. The east room on the second floor has a wall-to-wall carpet as well as an area rug. The floor of the modern kitchen in the Greek Revival section is covered with faux-brick linoleum tiles. The adjacent room in the north addition has a linoleum floor, though the unfinished garret has wood floors. The entire second floor of the Greek Revival section contains wall-to-wall carpet.

4. **Wall and ceiling finish:**

The walls and ceilings of the house are predominantly plaster, except for the kitchen and first floor of the north addition, which both have modern, random-width vertical paneling.

5. **Openings:**

a. **Doorways and doors:**

Both sections of the house generally have four-panel wood doors that retain their original door surrounds and trim.

b. **Windows:**

The Second Empire section of the house has two-over-two double hung sash windows on all three levels. Similarly, the Greek Revival section has six-over-six double-hung sash. Modern exterior storm and screen windows have been installed over all sash.

6. **Decorative features and trim:**

The Second Empire block of Locust Grove contains an original, painted marble mantelpiece adjacent to the north wall of the first floor stair hall. This mantel appears to have been relocated from the east room of the first floor. A modern brick fireplace is currently located in the east room and covers most of the west wall. A second mantel has been removed from the west room. On the second floor, both the east and the west rooms contain chimney breasts with openings to receive stove pipes. Both mantel shelves have been removed. These rooms retain their original window and door surrounds. The south room of the Greek Revival section has a simply detailed, wood mantel and an opening for a stove pipe on the north wall. A majority of the original molded baseboards remain throughout the house.

7. **Hardware:**

The primary door on the south facade of the Second Empire section has two original, late-nineteenth century metal doorknobs with intricate floral designs. The doors into the second floor bedrooms in this section of the house have their original, decorated hinges. Early twentieth century porcelain doorknobs are located throughout the house, though some have been removed.

8. **Mechanical equipment:**

a. **Heating, air conditioning, ventilation:**

An oil-fueled furnace in the basement of the Greek Revival section heats modern radiators throughout the house. Baseboard hot water heating units are located in the kitchen, the room over the kitchen, and the first floor room in the northernmost addition. A metal heat register remains on the east wall of the west room in the Second Empire section, suggesting that the house may have had a gravity fed heating system at one time. A window air-conditioning unit is installed in the window of the west wall of the south room of the Greek Revival section.

b. **Lighting:**

Twentieth century ceiling-mounted light fixtures are present in each of the major rooms and hallways on the first and second floors of the house. Wall-mounted fixtures are found in the third floor of the Second Empire section. No late-nineteenth or early-twentieth century fixtures remain.

c. **Plumbing:**

Locust Grove contains two modern baths and a modern kitchen. All plumbing appears to have been updated within the last twenty years.

9. **Original furnishings:**

No original furnishings remain in Locust Grove.

D. Site:

1. **General setting and orientation:**

Locust Grove is located on the north side of State Route 299 in St. Georges Hundred, New Castle County, between the cities of Middletown and Odessa, Delaware. The original 120-acre lot associated with the house has been reduced to 3.6 acres (approximately 275' x 570'). The front of the house was originally oriented to the east, but the Second Empire addition of ca. 1870 reoriented the house south, to front the road. A gravel driveway enters the site east of the dwelling and continues nearly to the rear of the property, providing access to several outbuildings.

The dwelling's immediate setting consists of lawn on the north and west, a gravel drive and lawn on the east, and a filled-in pool at the rear (north) of the house. Fields lie to the east, west, and north of the house, as well as beyond Route 299 to the south. Several large trees are scattered across the front and side lawns of Locust Grove, including a large Black Walnut and several large conifers.

2. **Historic landscape design:**

The existing plantings (comprised of specimen as well as modern plantings), drive, and lawn are reminiscent of typical nineteenth century landscapes.

3. **Outbuildings:**

A single-story, wood-framed, square-plan smoke house (ca. 1830) is located immediately northeast of the dwelling. The building measures 12'-4" on each side and has a brick foundation and a standing seam metal, pyramidal roof. The walls are covered with aluminum siding. An open, shed-roofed porch extends from the smoke house's west side and is supported on cedar posts. The porch roof is constructed of corrugated fiberglass. The building's east and west elevations contain six-light hopper sash flanked by mid-twentieth-century applied shutters. A vertical wood-planked door with strap hinges and Norfolk latch is located on the south elevation. The interior has plank floors and exposed heavy timber framing. Hewn vertical clapboards are nailed to the outside of the timber framing.

A modern, in-ground, concrete swimming pool was formerly located immediately west of the dwelling. The pool has been filled with dirt, leaving only the diving board, ladder, and concrete coping. A small, one-story pool house is located northwest of the former pool. This building is of modern construction and is covered with aluminum siding. Its roof is covered with asphalt shingles.

Several modern outbuildings and structures also occupy the site. A single-story plywood shed is located north of the pool house and was constructed after 1945.

A mid-twentieth century pole-barn, with gabled roof and corrugated metal siding, is east of the smoke house. A post-1945, gable-roofed machine shed with corrugated metal siding is north of the house.

PART III. SOURCES OF INFORMATION

A. **Architectural Drawings and Maps:**

Baist, G. W. *Atlas of New Castle County, Delaware.* Philadelphia: G. W. Baist, 1893.

Hopkins, G. M. & Co. *Map of New Castle County, Delaware.* Philadelphia: G. M. Hopkins & Co., 1881.

Pomeroy & Beers. *Atlas of the State of Delaware.* Philadelphia: Pomeroy & Beers, 1868.

Rea, Samuel & Jacob Price. *Map of New Castle County from Original Survey.* Philadelphia: Rea and Price, 1849.

B. **Historic Views:**

Research conducted to date uncovered no historic views of the property.

C. **Bibliography:**

Primary and unpublished sources:

New Castle County Census Records. New Castle County Agricultural Production Census Records. 1850. On file at the Delaware State Archives, Dover, Delaware.

New Castle County Military Records. Samuel Penington and Franklin Penington military records. 1862-1863. On file at the Delaware State Archives, Dover, Delaware.

New Castle County Orphans Court Records. Samuel Penington Orphan Court Record Book N, Vol. 1, page 401. 1830. On file at the Delaware State Archives, Dover, Delaware.

New Castle County Probate Records. Joseph Meldrum Probate Record. 1801-1807. On file at the Delaware State Archives, Dover, Delaware.

New Castle County Recorder of Deeds. Deeds used: W2-441, D3-113, I3-432, D41-551, A52-160, U81-128, 109-0083. 1801-1980. Deeds on file at the City-County Building, Wilmington, Delaware.

New Castle County Tax Assessment Records. St. Georges Hundred Records. 1816-1870. On file at the Delaware State Archives, Dover, Delaware.

Secondary and published sources:

Herman, Bernard L. *Architecture and Rural Life in Central Delaware, 1700-1900.* Knoxville: University of Tennessee Press, 1987.

Herman, Bernard L., et al. *Historic Context Master Reference and Summary.* Newark, Delaware: Center for Historic Architecture and Engineering, University of Delaware, 1989.

Historic Preservation Group of Kise Franks & Straw. "Locust Grove (a.k.a. Meldrum Farm)." National Register of Historic Places Registration Form, Determination of Eligibility. May 1994. On file at the Delaware State Historic Preservation Office, Dover, Delaware.

Passmore, Joanne O., Charles Maske, and Daniel E. Harris. *Three Centuries of Delaware Architecture.* n.p.: Delaware State Grange and Delaware American Bicentennial Commission, 1978.

Scharf, J. Thomas. *The History of Delaware: 1609-1888.* Philadelphia: L. J. Richards & Company, 1888.

PART IV. PROJECT INFORMATION

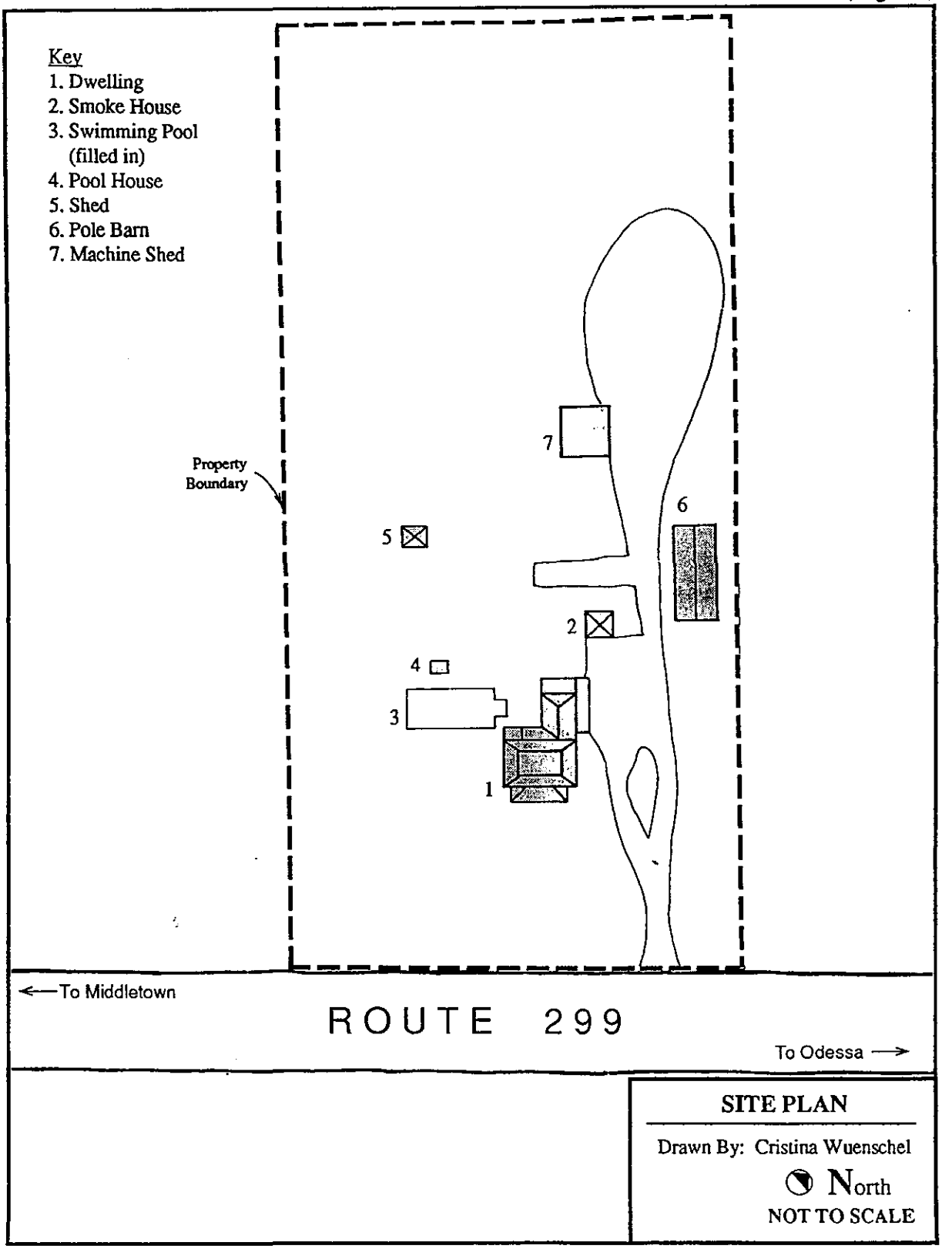
This documentation was undertaken in the summer of 1995 in accordance with a May 1987 Memorandum of Agreement among the Federal Highway Administration, the Delaware State Historic Preservation Officer, and the Advisory Council on Historic Preservation. It serves as a mitigative measure prior to construction of the Odessa interchange of the Route 13-Relief Route (also called Delaware State Route 1).

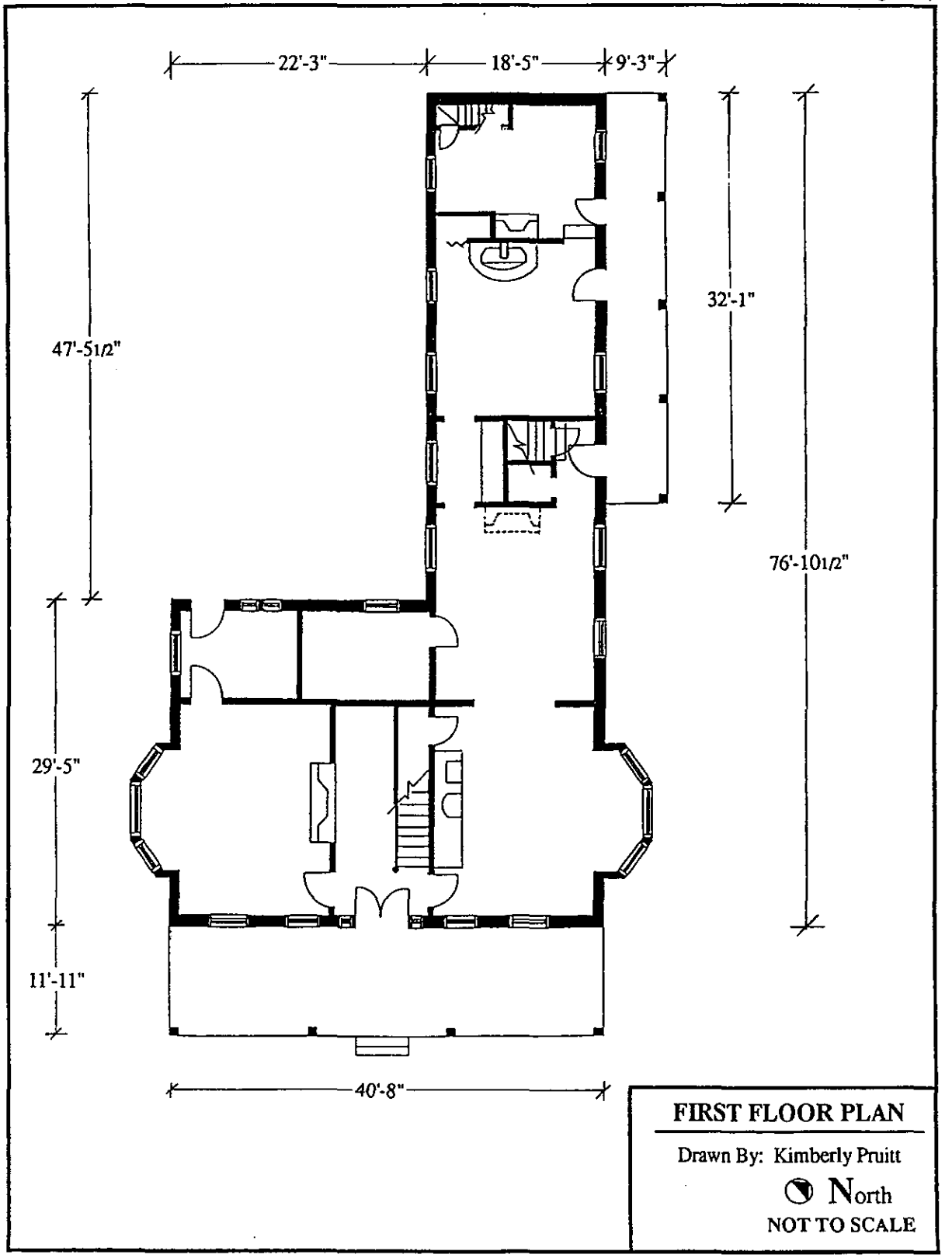
Alice P. D. Coneybeer
Cultural Resources Group
Kise Franks & Straw
Philadelphia, PA

July 1995

Aerial View of Locust Grove (ca. 1991)

North


Key
1. Dwelling
2. Smoke House
3. Swimming Pool
(filled in)
4. Pool House
5. Shed
6. Pole Barn
7. Machine Shed
Property
Boundary
1
2
3
4
5
6
7
←To Middletown
ROUTE 299
To Odessa →
SITE PLAN
Drawn By: Cristina Wuenschel
North
NOT TO SCALE

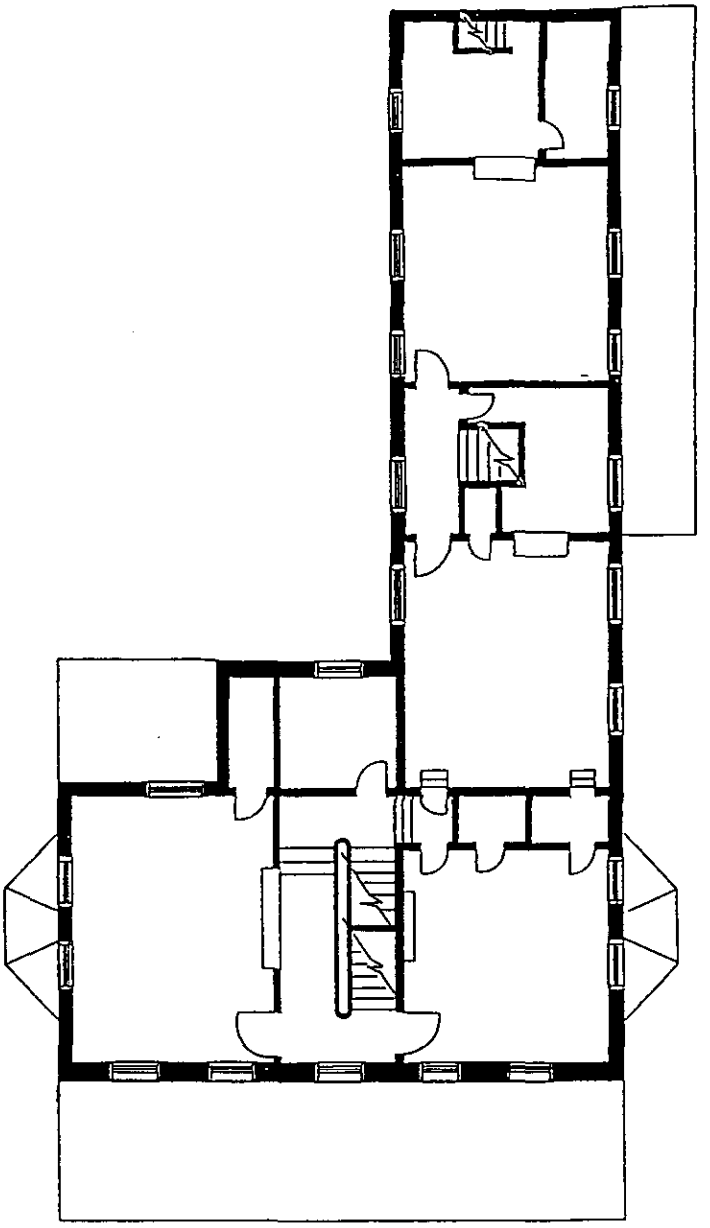


FIRST FLOOR PLAN

Drawn By: Kimberly Pruitt

North

NOT TO SCALE

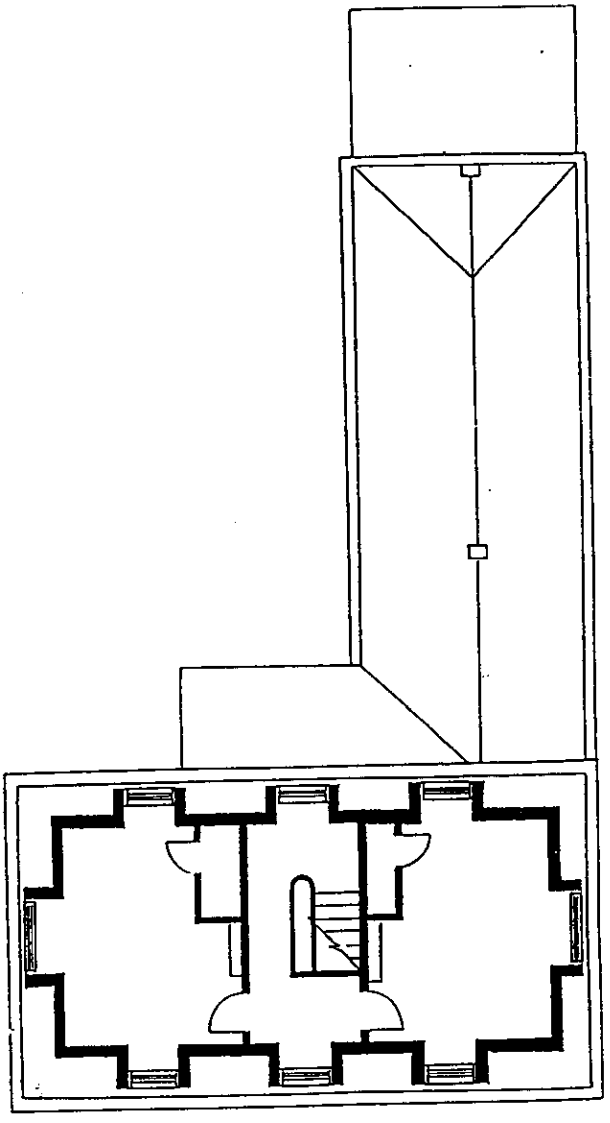


SECOND FLOOR PLAN

Drawn By: Kimberly Pruitt

North

NOT TO SCALE



THIRD FLOOR PLAN

Drawn By: Kimberly Pruitt

North

NOT TO SCALE

HISTORIC AMERICAN BUILDING SURVEY

INDEX TO PHOTOGRAPHS

Locust Grove (Meldrum Farm)
749 Middletown-Odessa Road
Middletown
New Castle County
Delaware

HABS No. NJ-DE-266

Photographer: Tim O'Brien

July 1995

DE- 266 -1 VIEW WEST, NORTHEAST AND SOUTHEAST ELEVATIONS

DE- 266 -2 VIEW NORTHWEST, SOUTHEAST FRONT

DE- 266 -3 VIEW SOUTH, EAST SIDE

DE- 266 -4 VIEW EAST, WEST AND NORTHWEST SIDES

DE- 266 -5 VIEW NORTHEAST, SOUTHWEST SIDE

DE- 266 -6 VIEW WEST, DETAIL OF SOUTHEAST SIDE

DE- 266 -7 VIEW SOUTH, DETAIL OF EAST BAY

DE- 266 -8 FIRST FLOOR, CENTRAL HALL LOOKING SOUTHEAST

DE- 266 -9 FIRST FLOOR, DETAIL OF NEWEL POST

DE- 266 -10 FIRST FLOOR, SOUTHWEST ROOM, WEST BAY

DE- 266 -11 FIRST FLOOR, SOUTHEAST ROOM FROM ADJACENT ROOM

DE- 266 -12 SECOND FLOOR, SOUTHEAST ROOM, WEST WALL

DE- 266 -13 SECOND FLOOR, NORTHWEST ROOM, DOOR DETAIL

DE- 266 -14 SECOND FLOOR, DETAIL OF STAIRWAY

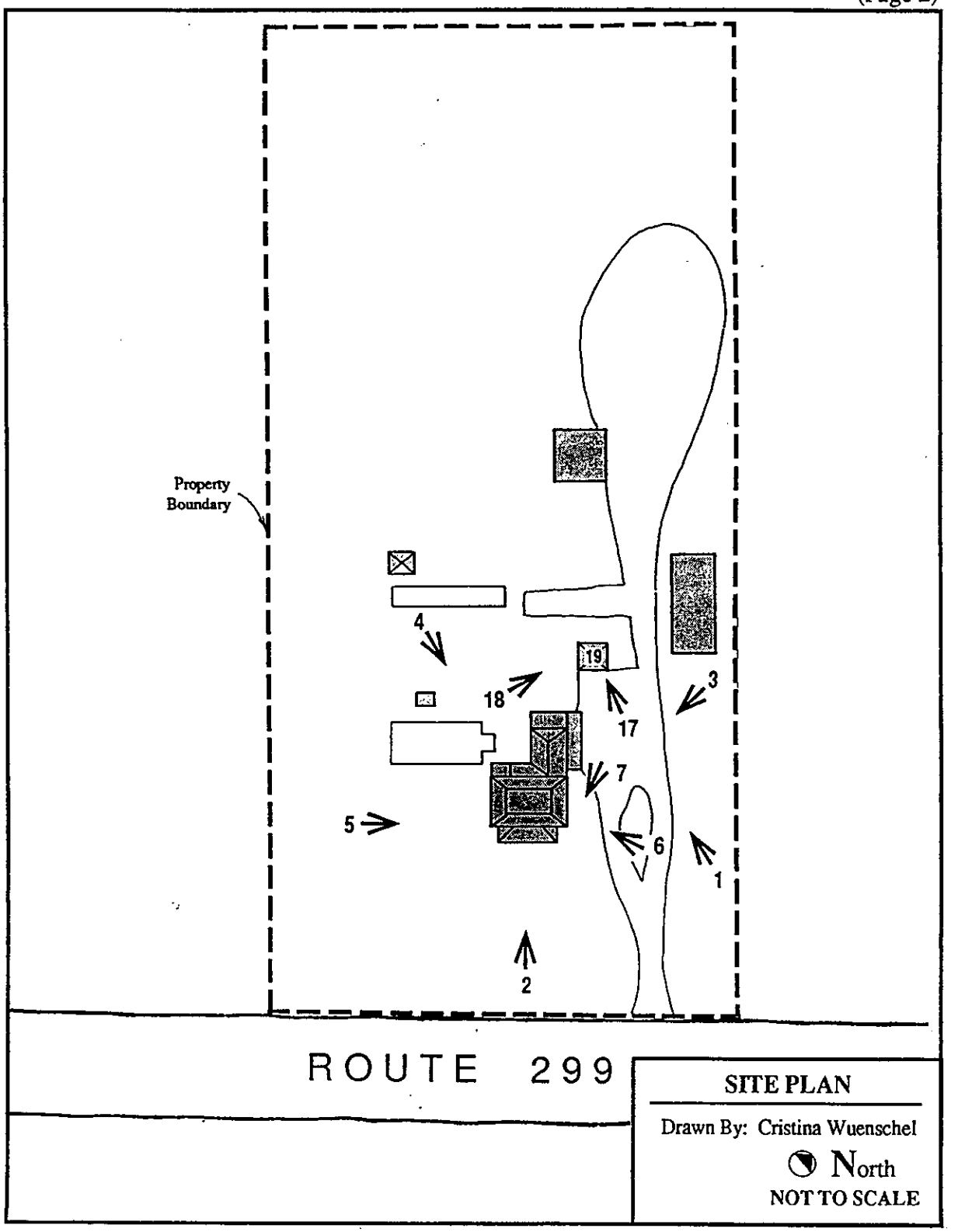
DE- 266 -15 SECOND FLOOR, SOUTHWEST ROOM, DETAIL OF DOOR HINGE

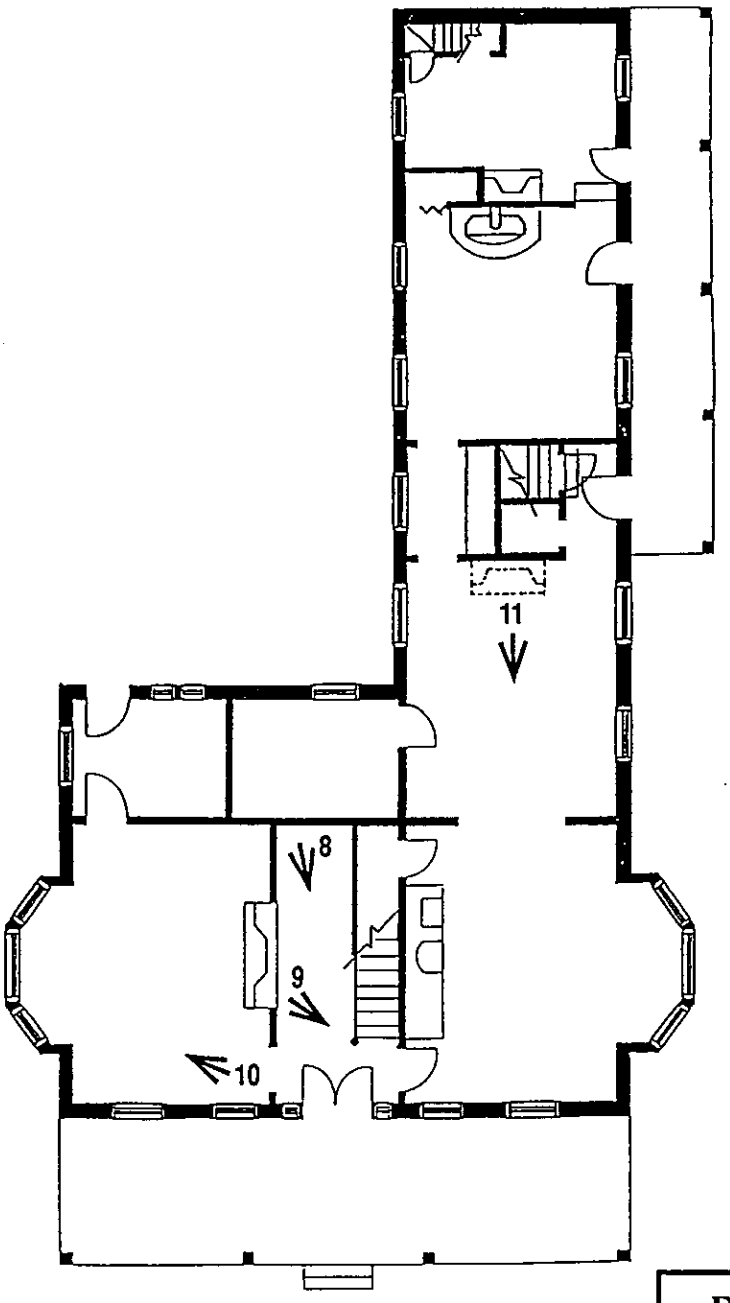
DE- 266 -16 THIRD FLOOR, SOUTHWEST ROOM, SOUTH AND EAST WALLS

DE- 266 -17 SMOKE HOUSE, VIEW WEST, SOUTH AND EAST SIDES

DE- 266 -18 SMOKE HOUSE, VIEW NORTH, WEST AND SOUTH SIDES

DE- 266 -19 SMOKE HOUSE INTERIOR, NORTH AND WEST WALLS


Property Boundary
4
19
18
3
17
7
5
6
1
2
ROUTE 299
SITE PLAN
Drawn By: Cristina Wuenschel
North
NOT TO SCALE



FIRST FLOOR PLAN

Drawn By: Kimberly Pruitt

North

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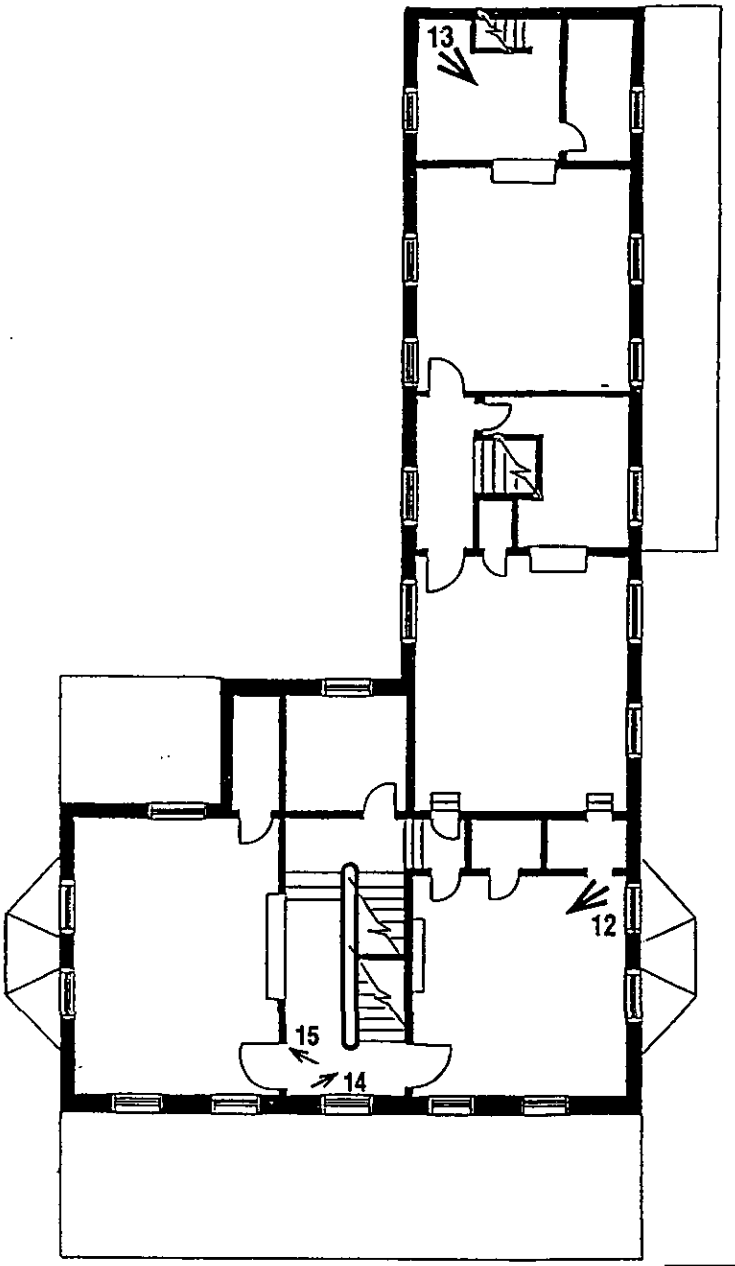
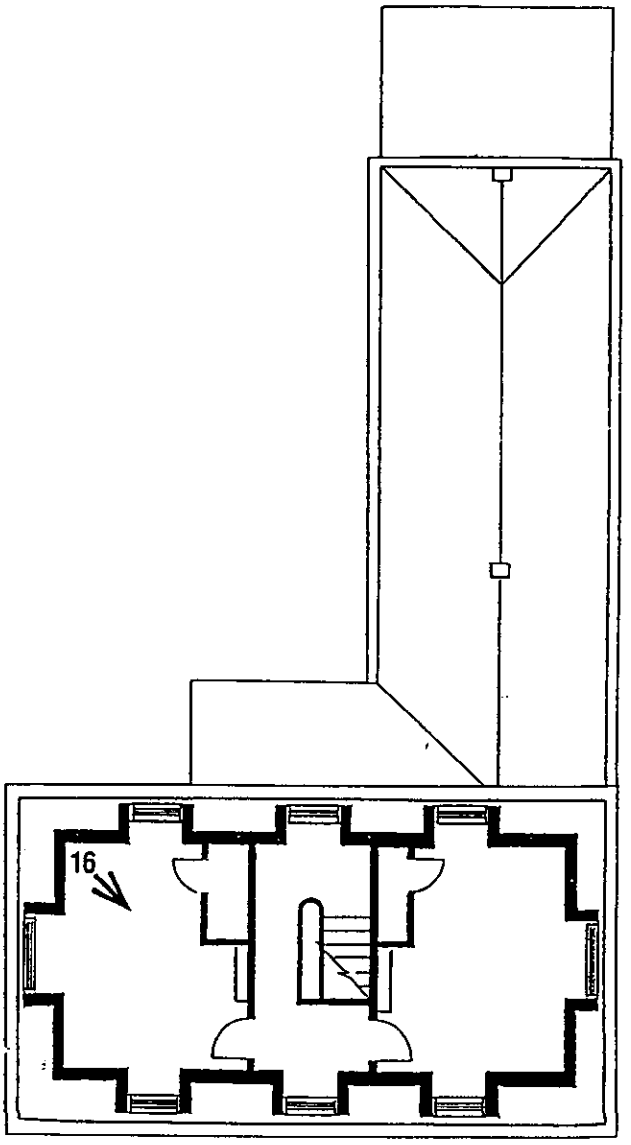


SECOND FLOOR PLAN

Drawn By: Kimberly Pruitt

North

NOT TO SCALE



THIRD FLOOR PLAN

Drawn By: Kimberly Pruitt

North

NOT TO SCALE

HABS No. DE-266-1

HABS No. DE-266-2

HABS No. DE-266-3

HABS No. DE-266-4

HABS No. DE-266-5

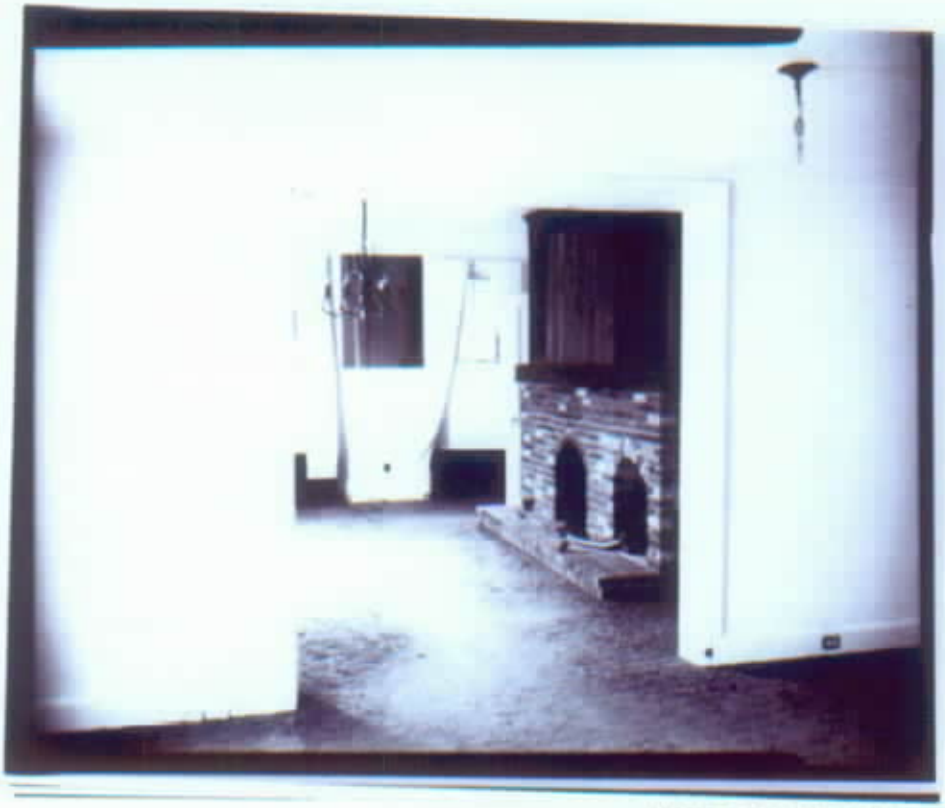
HABS No. DE-266-6

HABS No. DE-266-7

Habs No. DE-266-8

HABS No. DE-266-9

Habs No. DE-266-10



HABS No. DE-266-11

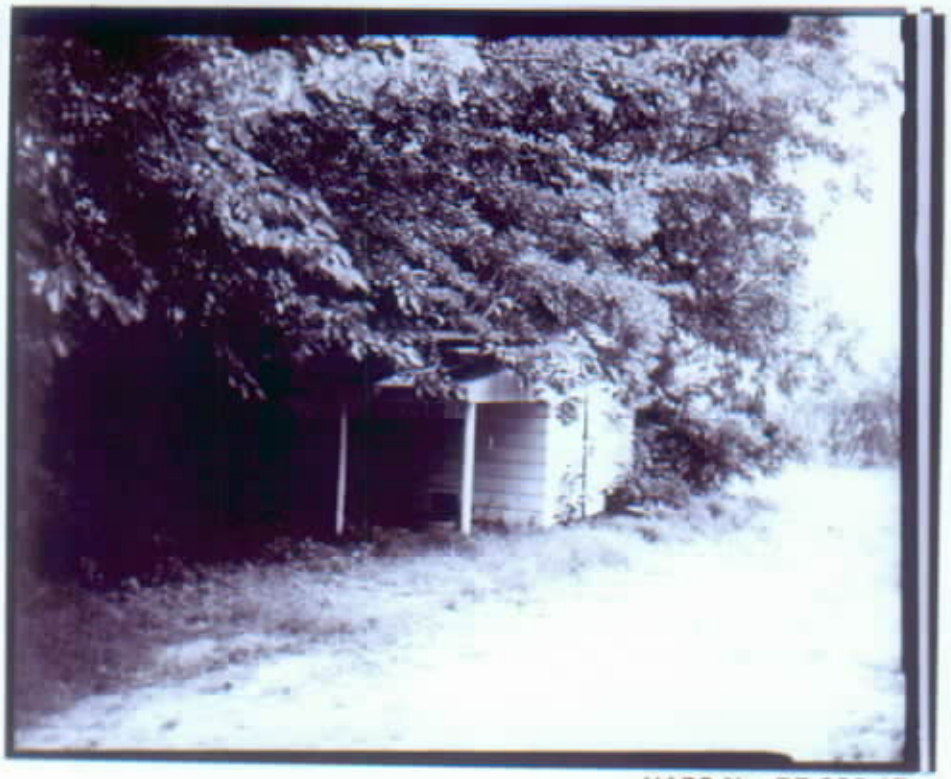
HABS No. DE-266-12

HABS No. DE-266-13

Habs No. DE-266-14

Habs No. DE-266-15

HABS No. DE-266-16



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HABS No. DE-266-18

HABS No. DE-266-19

APPENDIX C: Artifact Cataloging and Methods
Translations of Utilized Codes

APPENDIX D: Ceramic MNVs, East Block

APPENDIX E: Ceramic MNVs, West Block

APPENDIX F: Artifact Catalog

APPENDIX G: Floral Analysis

These appendices are available at the agencies listed below.

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East Orange, New Jersey 07019

(973) 678-1960

Delaware Department of Transportation
Division of Highways
U.S. Route 113
Dover, Delaware 19903
Contact: Kevin Cunningham, Archaeologist
302-760-2125
kcunningham@mail.dot.state.de.us

Please note the tables of information relevant to Appendices D and E on pages 73, 74, and 75; to Appendix F on pages 71, 73, 74, 75, 82, 86, 87, 94, 95, and 96; and to Appendix G on page 97.

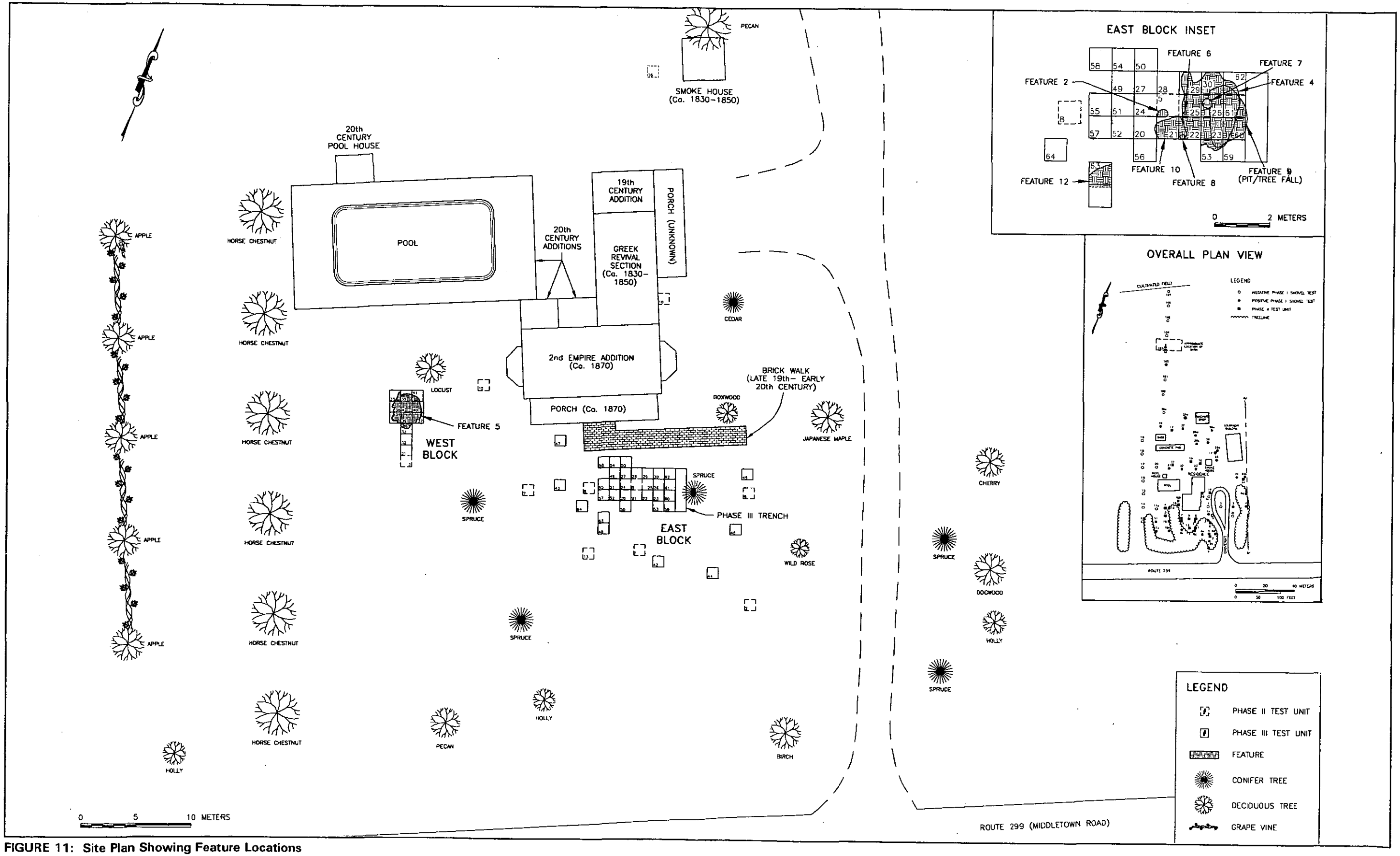

FIGURE 11: Site Plan Showing Feature Locations